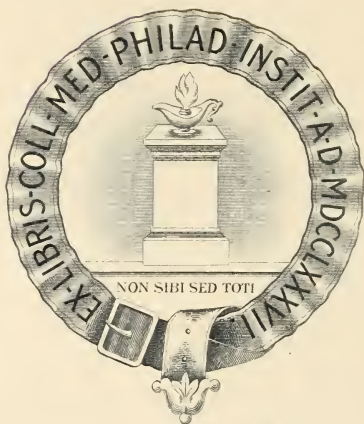




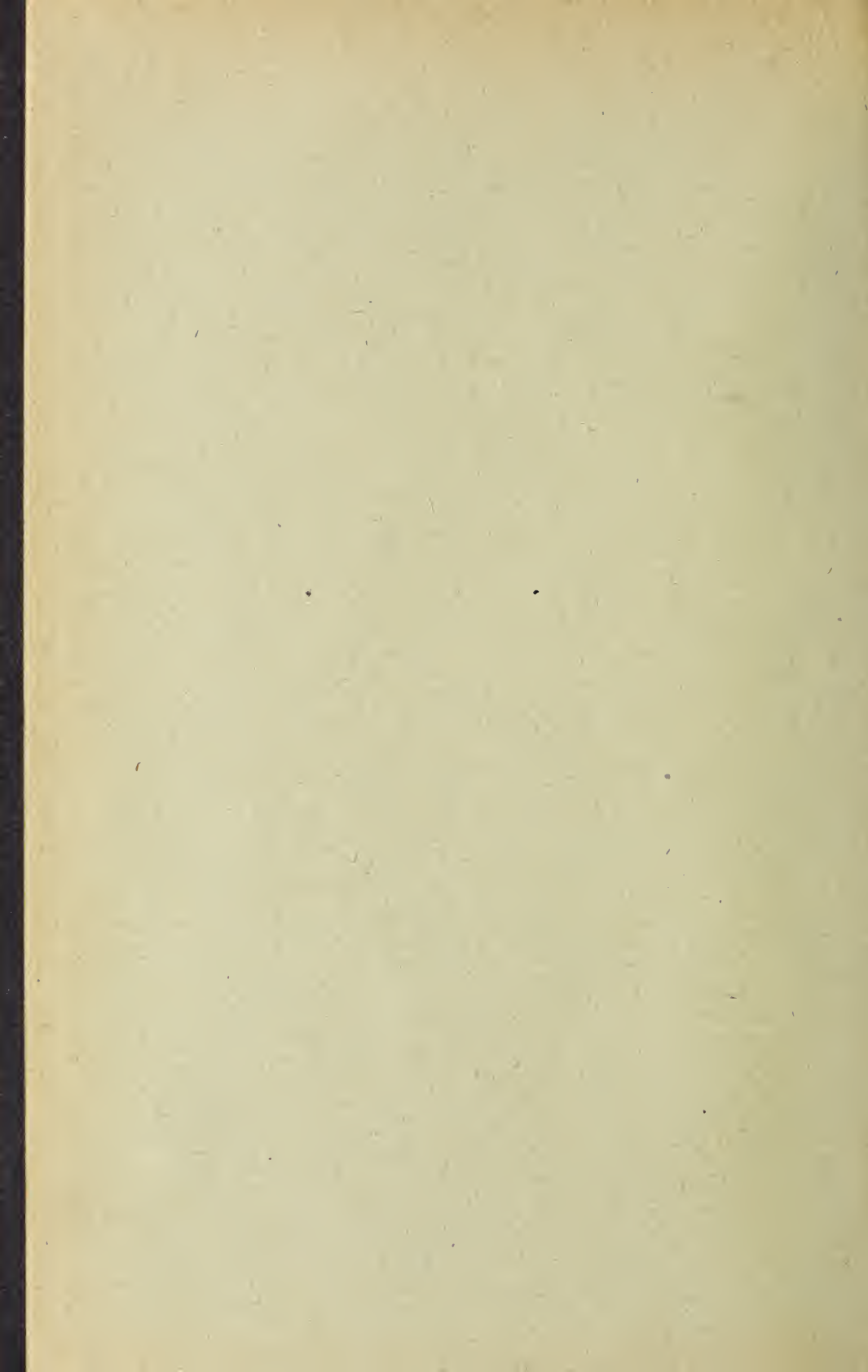
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INDEX TO VOL. XXIX

1914

TITLES OF ORIGINAL ARTICLES

	Page		Page
A Case of Moral Imbecility Benefited by Craniectomy. Cecil E. Reynolds, M.R.C.S., Los Angeles, Cal.....	139	Menopause, and Some of Its Dangers. F. W. Thomas, M.D., Claremont, Cal.	228
Abortions, Indications for. M. L. Moore, M.D., Los Angeles, Cal.....	256	Mexican Revolution, Some Sanitary Aspects of the. Dr. Howard D. King, New Orleans, La.....	63
Appendix as a Cause of Dyspepsia. Harry G. Watson, M.D., Los Angeles, Cal.	149	Negro—America's Special Problem in Eugenics. Frank Lydstrom, M.D., Chicago, Ill.	334
Auto-Intoxication. J. Francis White, M.D., San Diego, Cal.....	6	New Cure for Diabetes and Other Diseases Due to Overeating. Boardman Reed, M.D., Alhambra, Cal...288	
Average Doctor's Average Case. Paul Bresee, M.D., Los Angeles, Cal....	253	Obesity Treatment, by Modern Improvements in Electro-Therapy. Dr. Chas B. Graf, New York City, N. Y.	398
Breast Feeding—Indications and Contra-Indications. Rea Smith, M. D., Los Angeles, Cal.....	389	Pelvic Surgery, Conservative. W. O. Henry, M.D., Los Angeles, Cal....	109
Cancer, The Early Diagnosis of. J. K. Swindt, Pomona, Cal.....	194	Peptic Ulcer, Early Diagnosis of. Robert Pollock, M.D., San Diego, Cal.	154
Cerebral Rheumatism and Cholera. Dr. Thomas Coe Little, San Diego, Cal.	34	Pregnancy, Twin, and Fibroids—A Case Report. Dr. G. M. Lazard, Los Angeles	364
Cholecystectomy with Report of Four Cases of Hydrops. H. W. Edwards, B.Sc., Los Angeles, Cal.....	219	Pulmotor in Asphyxia Neonatorum. C. C. Steuffer, M.D., Harrisburg, Pa. 64	
Constipation, Treatment of—Diet, Exercises and the Mechanical Measures Curative; Agar-Agar and the Purified Petroleum Products the Best Palliatives. Boardman Reed, M.D., Los Angeles, Cal.....	145	Pyelitis in Infants. Dr. P. V. K. Johnson, Los Angeles.....	359
Dermatology, Relations of to General Practice. Dr. John C. Yates, San Diego, Cal.	332	Pyloric Stenosis, Congenital. Homer C. Oatman, San Diego, Cal.....	116
Doctor's Dream. Victor C. Vaughan, President American Medical Association, Ann Arbor, Mich.....	99	Radium in Surgery. Howard A. Kelly, M.D., Baltimore, Md.....	31
Drug Administration. George L. Servoss, M.D., Gardnerville, Nev.....	295	Radium Therapy in Cancer, The Present Status of. A. C. Cowperthwaite, M.D., Los Angeles, Cal.....	189
Elephantiasis. Homer C. Oatman, M.D., San Diego, Cal.....	114	Relation of the Accessory Nasal Sinuses to One Another. J. W. Murphy, M.D., Cincinnati, O.....	66
Fees, Secret Division of. Dr. Andrew S. Lobinger, Los Angeles, Cal.....	223	Rheumatism Phylacogen, Report of Cases Treated with. A. A. Stafford, M.D., Alameda, Cal.....	290
Gastric Ulcer. Russell S. Fowler, M.D., Brooklyn, N. Y.....	153	Roentgenologist and the Clinician. Wm. B. Bowman, M.D., Los Angeles, Cal.	9
General Paresis, Intra-Cranial Treatment of. Edward Huntington Williams, M.D., Los Angeles, Cal.....	285	Shaffroth-Calloway Bill, Resolutions Endorsing the, House Bill No. 12,-864, Senate Bill No. 4370, adopted by the Los Angeles Society for the Study and Prevention of Tuberculosis	116
Hebostectomy. Frank C. Ainley, M.D., Los Angeles	351	Stigmata, One of the Lesser Known. Cecil E. Reynolds, M.D., D.H.P., Los Angeles	363
Hip Joint, Disarticulation of, with Report of Case. H. W. Mills, M.R.C.S., L.R.C.P., London, England; San Bernardino, Cal.	157	Three Years' Work in the Children's Hospital, A Brief Resume. Dr. Chalmers Francis, Los Angeles, Cal.	394
Infantile Paralysis—Causes and Treatment of Deformity. John Carling, M.D., Los Angeles, Cal.....	105	Tubercular Meningitis, The Difficulty in Diagnosing from Gastro-Intestinal Diseases. Robert Goodman, M.D., Philadelphia, Pa.....	64
Internal Secretions and Their Relation to Disease. Lorena M. Breed, M.D., Pomona, Cal.	319	Tuberculosis Nurses. George E. Malsbary, M.D., Los Angeles, Cal.....	181
Intestinal Stasis, Chronic, Surgical Treatment. Rea Smith, M.D., Los Angeles, Cal.	1	Tuberculosis Problem in the United States, Some Suggestions for a More Rational Solution. S. Adolphus Knopf, M.D., New York.....	38
Lingual Tonsil, Symptoms of the Pathological, and Its Treatment. Harold Hays, A.M., M.D., New York	65	What Fools These Mortals Be. H. D. Hyatt, M.D., Kinston, N. C.....	61
Malt and Beer, Preparations of. Jacob A. Steinemann, Los Angeles, Cal... 42		X-Ray Studies of Stomach and Colon. Dr. Robert Soiland, M.D., Los Angeles, Cal.	4
Management of Throat and Nose Patients for Prophylactic and Therapeutic Measures in Other Diseases. L. C. Ingram, Red Wing, Minn.	66		
Medico-Economic Movement in Greater New York. Oscar Rotter, M.D., New York	65		

AUG 2 - 1915
90612

AUTHORS OF ORIGINAL ARTICLES

	Page		Page
Ainley, Frank C.	351	Malsbary, George E.	181
Bowman, Wm. B.	9	Mills, H. W.	157
Breed, Lorena M.	319	Moore, M. L.	256
Bresee, Paul	253	Murphy, J. W.	66
Carling, John	105	Oatman, Homer C.	114-116
Cowperthwaite, A. C.	189	Pollock, Robert	154
Edwards, H. W.	219	Reed, Boardman	145-288
Fowler, Russell S.	153	Reynolds, Cecil E.	139-363
Francis, Chalmers	394	Rotter, Oscar	65
Goodman, Robert	64	Servoss, George L.	295
Graf, Chas. B.	298	Smith, Rea	1-389
Hays, Harold	65	Solland, Albert	4
Henry, W. O.	109	Stafford, A. A.	290
Hyatt, H. D.	61	Steinemann, Jacob A.	42
Ingram, L. C.	66	Steuffer, C. C.	64
Johnson, P. V. K.	359	Swindt, J. K.	194
Kelly, Howard A.	31	Thomas, F. W.	228
King, Howard D.	63	Vaughan, Victor C.	99
Knopf, S. Adolphus	38	Watson, Harry G.	149
Lazard, G. M.	364	White, J. Francis.	6
Little, Thomas Coe.	34	Williams, Edward Huntington.	285
Lobinger, Andrew S.	223	Yates, John C.	332
Lydston, Frank	334		

EDITORIALS

	Page		Page
Approaching Meetings	87	Radiography of Soft Tissues.	300
Arthritis Deformans, Treatment of. By Chas. W. Delaney, M.D.	203	Radium Therapy	50
Bryan Versus Darwin.	203	Registration Without Examination.	169
California Association for the Study and Prevention of Tuberculosis.	303	Salvarian Deaths	85
Child Suicide in Germany.	121	Santa Barbara's Cottage Hospital.	16
Dean Kress and the Graduate School.	370	Santa Barbara Meeting	163
Dr. Garre and the Thyroid Gland.	168	Sex Education	88
Dr. Reynolds Honored	370	Snake Bites and Poison Oak.	234
Druggless Healers, Reply to the Pro- posed Initiative to License.	340	Southern California Colleges	340
Editorial Notes	405	Southern California Medical Society.	198-404
16-51-89-127-170-204-238-267-304-343-373		State Journal Inconsistencies.	87
Editorial Notes.	405	Suicides in the University of Penn- sylvania	168
Gates, Howard B., Death of.	202	Suit Against Our Editor.	300-339
Help Hector Alliot	168	The Kalikak Family and the Mende- lian Law	167
Ideal Stasis	88	The Nurses' Petition and the State Petition	198
Infant Mortality	339	The Snow Affair	12
Meat, No Need to Fear.	404	Travel Study Club of American Phy- sicians	340
Medical Building	342	Tuberculosis Nurses	15-50-88
Medical Building Sting	234	Tuberculosis, Tuberculin Treatment.	405
Medical Education in Los Angeles, A New Departure in.	237	Twilight Sleep	366
Mitchell, S. Weir	122	War	263
Nursing Legislation, Mischievous.	341	Warning to Users of Turpentine for Medical or Veterinary Purposes.	122
Obstetrical Society, Los Angeles.	263-379-412	We Are Going to Double Our Circula- tion	12
Prostitutes, Physical Examination of.	201	Whiteside, Dr. John R.	121
Prostitution, Control of.	403	Wild Life, Conservation of.	264
Pulmonary Tuberculosis, Some Recent Methods in the Diagnosis and Treatment of	373		

BOOK REVIEWS

	Page		Page
A Mind Remedy, Ryerson.	308	Anatomy and Physiology for Nurses, Pope	132
Anesthesia, Local and Regional, Allen.	409	Anders' Practice of Medicine.	58
Anatomy and Physiology of the Eye, Croskey	308	Anoci-Association, Crile	309
Anatomy and Physiology for Nurses, Little	129	Atmospheric Air in Relation to Tu- berculosis	377

	Page
Bacteriology, Gordon	304
Balneo-Gymnastic Treatment, Schott.....	376
Biological Therapeutics, Parke, Davis & Co.	378
Biology, McFarland	136
Blood Pressure, Goodman.....	246
Brewers' Association, Year Book.....	130
Bryan's Surgery	56
Clinical Diagnosis and Urinalysis, Ar- neill	54
Clinical History in Outline, Woolley.....	308
Clinical Medicine, Thomson.....	307
Collected Papers from the Research Laboratory, Parke, Davis & Co.....	311
Communicable Diseases, Health Bulle- tin Number 62.....	132
Cunningham's Anatomy	26
Dentist's Diary, Lehn & Fink.....	56
Diagnosis and Treatment of Digestive Diseases, Niles	177
Diagnostic Methods, Brooks.....	129
Diagnostic Symptoms in Nervous Dis- eases, Hunt	135
Digest of Comments on U. S. P. and N. F.	308
Diseases of Bones and Joints, Ely.....	308
Diseases of the Eye, May.....	311
Diseases of the Rectum and Anus, Cooke	245
Dorland's Medical Dictionary.....	56
Drug Assay, Biochemic Methods, Pit- tenger and Stewart.....	178
Electricity in Diseases of the Eye, Ear, Nose and Throat, Coleman.....	177
Genito-Urinary Diseases and Syphilis, Ballinger and Elder.....	55
Geriatrics, Nascher	133
Gleason's Manual of Diseases of the Nose, Throat and Ear.....	409
Guiding Principles in Surgical Prac- tice, Neef	309
Gunshot Injuries, Lagarde.....	134
Hematology, Clinical, Ward.....	245
Histology, Bailey	54
History of Medicine, Garrison.....	55
Hoakley's Laryngology	309
Howell's Physiology	54
Hydrotherapy, George Knapp Abbott.....	131
Infant Feeding, Grulee.....	247
Infections of the Hand, Kanavel.....	129
International Clinics	57-134
Kentucky State Board of Health, Bulletin of	24
Kirkes' Handbook of Physiology.....	406
Manson's Tropical Diseases.....	410
Materia Medica, Bastedo.....	59
Medical Dictionary for Nurses, Pope.....	376
Medical Jurisprudence, Brothers.....	377
Medical Treatment, George Cheever Shattuck	132

	Page
Merck's Annual Report	25
Midwife in England	132
Mortality Statistics, 1912.....	130
Motherhood, Harris.....	410
Municipal Ordinances Relating to Health	377
Murphy's Surgical Clinics.....	54-128-283-311-378-408
Nervous System, Diseases of, Gordon.....	57
Obstetrics, Case Histories, De Nor- mandie	498
Ophthalmic Surgery, Beard.....	135
Pathology, Text-Book, Delafield and Prudden	406
Pediatrics, Case Histories in, Morse.....	53
Pediatrics, Kerley	136
Pediatrics, McKee, Wells and Taylor.....	246
Pharmacology, Greene	378
Physicians' Visiting List, Blakiston's.....	411
Practical Medicine Series.....	130-135-283-378
Practical Sanitation, Gardner and Simonds	133
Practice of Surgery, Mumford.....	311
Progressive Medicine.....	133-283-407
Psychnalysis, Brill	204
Public Health Service Report, 1913.....	131
Pyorrhoea Alveolaris, Hecker.....	25
Radium and Radiotherapy, Newcomet.....	247
Reference Handbook of the Medical Sciences	174-407
Rheumatic Infections, Treatment of, Parke, Davis & Co.....	56
Rose and Carless' Manual of Surgery.....	410
Salvarsan Fatalities, Pathogenesis of, Wechselmann	130
Sander's Question Compendis, Bacteri- ology	55
Serology of Nervous and Mental Dis- eases, Kaplan	307
Simon's Clinical Diagnosis	128
Smithsonian Institution, Annual Re- port of the Board of Regents.....	24
Specific Diagnosis and Specific Medi- cation, Fyfe	128
State Board, Questions and Answers, Goepf	136
Stedman's Medical Dictionary.....	411
Stewart's Manual of Physiology, with Practical Exercises.....	406
The Fugitive Physician, or the Ad- ventures of a Texas Doctor, "Dr. Hyoscyamus Flyer".....	409
The Junior Nurse, Brown.....	178
The Tonsils, Barnes	377
The White Linen Nurse, Eleanor Hallowell Abbott	55
Therapeutics, Hoyt	307
Treatment of Chronic Leg Ulcers, Adams	178
Tuberculosis, Otis	132

GENERAL INDEX

	Page
A Mind Remedy, Ryerson.....	308
Abortion, Indications for, M. L. Moore, M.D., Los Angeles, Cal.....	256
Accessory Nasal Sinuses, Relation of to One Another, J. W. Murphy, M.D., Cincinnati, O.....	66
Ainley, Frank C.	351
Anatomy and Physiology for Nurses, Little	129
Anatomy and Physiology for Nurses, Pope	132

	Page
Anatomy and Physiology of the Eye, Croskey	308
Anders' Practice of Medicine.....	58
Anesthesia, Local and Regional, Allen.....	409
Anoci-Association, Crile	309
Anus, Fissures of the.....	249
Approaching Meetings	87
Arthritis Deformans, Treatment of, By Chas. W. Delaney, M.D.....	203
Atmospheric Air in Relation to Tu- berculosis	377

- Auto-Intoxication. J. Francis White, M.D., San Diego, Cal..... 6
- Average Doctor's Average Case. Paul Bresee, M.D., Los Angeles, Cal.....253
- Bacteriology, Gordon304
- Balneo-Gymnastic Treatment, Schott.....376
- Biological Therapeutics, Parke, Davis & Co.378
- Biology, McFarland136
- Blood Pressure, Goodman246
- Bowman, Wm. B. 9
- Breast Feeding—Indications and Contra-Indications. Rea Smith, M. D., Los Angeles, Cal.....389
- Breed, Lorena M.319
- Bresee, Paul253
- Brewers' Association, Year Book.....130
- Bryan's Surgery56
- Bryan Versus Darwin.....203
- California Association for the Study and Prevention of Tuberculosis.....303
- California State Board Examinations. 28
- Cancer, Early Diagnosis. J. K. Swindt, Pomona, Cal.194
- Carling, John105
- Cerebral Rheumatism and Cholera. Dr. Thomas Coe Little, San Diego, Cal. 34
- Child Suicide in Germany121
- Cholecystectomy with Report of Four Cases of Hydrops. H. W. Edwards, B. Sc., Los Angeles, Cal.....219
- Chorioepithelioma284
- Clinical Diagnosis and Urinalysis, Arneill 54
- Clinical History in Outline, Woolley...308
- Clinical Medicine, Thomson307
- Collected Papers from the Research Laboratory, Parke, Davis & Co.....311
- Communicable Diseases, Health Bulletin Number 62.....132
- Communications 26
- Constipation, Treatment of—Diet, Exercises and the Mechanical Measures Curative; Agar-Agar and the Purified Petroleum Products the Best Palliatives. Boardman Reed, M.D., Los Angeles, Cal.....145
- Cowperthwaite, A. C.189
- Cunningham's Anatomy 26
- Dean Kress and the Graduate School.....370
- Dentist's Diary, Lehn & Fink..... 56
- Dermatology, Relations of to General Practice. Dr. John C. Yates, San Diego, Cal.332
- Diabetes and Other Diseases Due to Overeating, New Cure, Boardman Reed, M.D., Alhambra, Cal.....288
- Diagnosis and Treatment of Digestive Diseases, Niles177
- Diagnostic Methods, Brooks.....129
- Diagnostic Symptoms in Nervous Diseases, Hunt135
- Digest of Comments on U. S. P. and N. F.308
- Diseases of Bones and Joints, Ely.....308
- Diseases of the Eye, May.....311
- Diseases of the Rectum and Anus, Cooke245
- Doctor's Dream. Victor C. Vaughan, President American Medical Association, Ann Arbor, Mich..... 99
- Dorland's Medical Dictionary 56
- Dr. Soiland, Letter from.....347
- Drug Administration. George L. Ser-voss, M.D., Gardnerville, Nevada.....295
- Drug Assay, Biochemic Methods, Pittenger and Stewart.....178
- Drugless Healers, Reply to the Proposed Initiative to License.....340
- "Drugless" Physicians344
- Dyspepsia, Appendix as a Cause, Harry G. Watson, M.D., Los Angeles, Cal.149
- Editorial Notes16-51-89-127-170-204-238-267-304-343-373
- Editorial Notes.....405
- Edwards, H. W.219
- Electricity in Diseases of the Eye. Ear, Nose and Throat, Coleman.....177
- Elephantiasis. Homer C. Oatman, M.D., San Diego, Cal.....114
- Feeble-mindedness and Physiologic Psychology249
- Fees, Secret Division, Dr. Andrew S. Lobinger, Los Angeles, Cal.....223
- Fowler, Russell S.153
- Francis, Chalmers.....394
- Friedman Serum and the Society of German Sanatorium Physicians.....213
- Garre, Dr., and the Thyroid Gland.....168
- Gates, Howard B., Death of..... 202
- Genito-Urinary Diseases and Syphilis, Ballinger and Elder 55
- Geriatrics, Nascher133
- Gleason's Manual of Diseases of the Nose, Throat and Ear.....409
- Goodman, Robert64
- Graf, Chas. B.....398
- Guiding Principles in Surgical Practice, Neef309
- Gunshot Injuries, Lagarde134
- Hays, Harold 65
- Help Hector Alliot168
- Hematology, Clinical, Ward245
- Henry, W. O.109
- Hip Joint, Disarticulation, with Report of Case. H. W. Mills, M.R.C.S., L.R.C.P., London, England. San Bernardino, Cal.....157
- Histology, Bailey 54
- History of Medicine, Garrison..... 55
- Hoakley's Laryngology309
- Hebostectomy. Frank C. Ainley, M.D., Los Angeles351
- Howell's Physiology 54
- Hyatt, H. D.....61
- Hydrotherapy, George Knapp Abbott.....131
- Ideal Stasis 88
- Infant Feeding, Grullee.....247
- Infantile Paralysis—Causes and Treatment of Deformity. John Carling, M.D., Los Angeles, Cal.....105
- Infections of the Hand, Kanavel.....129
- Ingram, L. C. 66
- Internal Secretions and Their Relation to Disease, Lorena M. Breed, M.D., Pomona, Cal.319
- International Clinics57-134
- Intestinal Stasis, Chronic, Surgical Treatment, Rea Smith, M.D., Los Angeles, Cal. 1
- Infant Mortality339
- Johnson, P. V. K.359
- Kalikak Family and the Mendelian Law167
- Kelly, Howard A. 31
- Kentucky State Board of Health, Bulletin of 24
- King, Howard D..... 63
- Kirkes' Handbook of Physiology.....406
- Knopf, S. Adolphus..... 38
- Lazard, G. M.364
- Lingual Tonsil, Symptoms of the Pathological, and Its Treatment. Harold Hays, A.M., M.D., New York 65
- Little, Thomas Coe..... 34
- Lobinger, Andrew S.223
- Los Angeles Obstetrical Society263
- Lydston, Frank334
- Malsbary, George E.181
- Malt and Beer, Preparations of, Jacob A. Steinemann, Los Angeles, Cal... 42
- Manson's Tropical Diseases.....410

	Page
Materia Medica, Bastedo	59
Meat, No Need to Fear.....	404
Medical Building	342
Medical Building Sting	234
Medical Dictionary for Nurses, Pope.....	376
Medical Education, A New Departure in, in Los Angeles.....	237
Medical Jurisprudence, Brothers.....	377
Medical Treatment, George Cheever Shattuck	132
Medico-Economic Movement in Great- er New York. Oscar Rotter, M.D., New York	65
Menopause, and Some of Its Dangers. F. W. Thomas, M.D., Claremont, Cal.	228
Merck's Annual Report	25
Mexican Revolution, Some Sanitary Aspects. Dr. Howard D. King, New Orleans, La.....	63
Midwife in England	132
Mills, H. W.	157
Mischievous Nursing Legislation.....	341
Mitchell, S. Weir.....	122
Moore, M. L.	256
Moral Imbecility, Case of, Benefited by Cranioctomy. Cecil E. Reynolds, M.R.C.S., Los Angeles, Cal.....	139
Mortality Statistics, 1912	130
Motherhood, Harris.....	410
Municipal Ordinances Relating to Health	377
Murphy, J. W.	66
Murphy's Surgical Clinics.....	54-128-283-311-378-408
Negro—America's Special Problem in Eugenics. Frank Lydstrom, M.D., Chicago, Ill.	334
Neosalvarsan, Memorandum Concern- ing the Chemical and Toxicological Examination of Some Samples of.....	312
Nervous System, Diseases of, Gordon.....	57
Nurses' Petition and the State Peti- tion	198
Oatman, Homer C.	114-116
Obesity Treatment, by Modern Im- provements in Electro-Therapy. Dr. Chas B. Graf, New York City, N. Y.	398
Obstetrical Society, Los Angeles.....	263-379-412
Obstetrics, Case Histories, De Nor- mandie	408
Ophthalmic Surgery, Beard	135
Paresis, General Intra-Cranial Treat- ment. Edward Huntington Wil- liams, M.D., Los Angeles, Cal.....	285
Pathology, Text-Book, Delafield and Prudden	406
Pediatrics, Case Histories in, Morse.....	53
Pediatrics, Kerley	136
Pediatrics, McKee, Wells and Taylor.....	246
Pelvic Surgery, Conservative. W. O. Henry, M.D., Los Angeles, Cal.....	109
Pharmacology, Greene	373
Physicians' Visiting List, Blakiston's.....	411
Pneumothorax, Artificial	90
Pollock, Robert	154
Practical Medicine Series, 130-135-283-378	
Practical Sanitation, Gardner and Simonds	133
Practice of Surgery, Mumford.....	311
Pregnancy. Twin, and Fibroids—A Case Report. Dr. G. M. Lazard, Los Angeles	364
Progressive Medicine	133-283-407
Prostitutes, Physical Examination of.....	201
Prostitution, Control of.....	403
Psychanalysis, Brill	204
Public Health Service Report, 1913.....	131

	Page
Pulmonary Tuberculosis, Some Recent Methods in the Diagnosis and Treatment	373
Pulmotor in Asphyxia Neonatorum, C. C. Steuffer, M.D., Harrisburg, Pa., 64	
Pyelitis in Infants. Dr. P. V. K. Johnson, Los Angeles.....	359
Pyloric Stenosis, Congenital. Homer C. Oatman, San Diego, Cal.....	116
Pyorrhoea Alveolaris, Hecker.....	25
Radiography of Soft Tissues.....	300
Radium and Radiotherapy, Newcomet.....	247
Radium in Surgery. Howard A. Kelly, M.D., Baltimore, Md.....	31
Radium Therapy	50
Radium Therapy in Cancer. Present Status, A. C. Cowperthwaite, M.D., Los Angeles, Cal.	189
Reed, Boardman	145-288
Reference Handbook of the Medical Sciences	174-407
Registration Without Examination.....	169
Reynolds, Cecil E.	139-363
Reynolds, Dr., Honored	370
Rheumatic Infections, Treatment of, Parke, Davis & Co.....	56
Rheumatism Phylacogen, Report of Cases Treated with. A. A. Stafford, M.D., Alameda, Cal.	290
Roentgenologist and the Clinician. Wm. B. Bowman, M. D., Los Ange- les, Cal.	9
Rose and Carless' Manual of Surgery.....	410
Rotter, Oscar	65
Salvarsan Deaths	85
Salvarsan Fatalities, Pathogenesis of, Wechselmann	130
Sander's Question Compends, Bacteri- ology	55
Santa Barbara's Cottage Hospital....	16
Santa Barbara Meeting	163
Sentiments of a Nurse.....	60
Serobacterins or Sensitized Bacterial Vaccines	59
Serology of Nervous and Mental Dis- eases, Kaplan	307
Servoss, George L.	295
Sex Education	88
Shaffroth-Calloway Bill, House Bill No. 12,864, Senate Bill No. 4,370, Reso- lutions Endorsing, adopted by the Los Angeles Society for the Study and Prevention of Tuberculosis.....	116
Simon's Clinical Diagnosis	128
Smith, Rea	1-389
Smithsonian Institution, Annual Re- port of the Board of Regents.....	24
Snake Bites and Poison Oak.....	234
Snow Affair	12
Society Reports	384
Soiland, Albert	4
Sore Feet, Treatment.....	414
Southern California Colleges.....	340
Southern California Medical Society.....	193-404
Specific Diagnosis and Specific Medi- cation, Fyfe	128
Stafford, A. A.	290
State Board, Questions and Answers, Goepf	136
State Journal Inconsistencies	87
State Sanatorium Bill	208
Stedman's Medical Dictionary.....	411
Steinemann, Jacob A.	42
Steuffer, C. C.	64
Stewart's Manual of Physiology, with Practical Exercises.....	406
Stigmata, One of the Lesser Known. Cecil E. Reynolds, M.D., D.H.P., Los Angeles	363

	Page		Page
Stomach and Colon, X-Ray Studies, Dr. Robert Soiland, M.D., Los An- geles, Cal.	4	Tuberculosis Notes	90
Suicides in the University of Penn- sylvania	168	Tuberculosis Nurses	15-50-88-181
Suit Against Our Editor.....	300-339	Tuberculosis, Otis	132
Swindt, J. K.	194	Tuberculosis Problem in the United States, Some Suggestions for a More Rational Solution. S. Adol- phus Knopf, M.D., New York.....	38
Syphilis of the Eye.....	216	Tuberculosis, Tuberculin Treatment.....	405
The Fugitive Physician, or the Ad- ventures of a Texas Doctor, "Dr. Hyoscyamus Flyer"	409	Turpentine, Warning to Users of for Medical or Veterinary Purposes....	122
The Junior Nurse, Brown.....	178	Twilight Sleep	366
The Tonsils, Barnes	377	Ulcer, Gastric, Russell S. Fowler, M.D., Brooklyn, N. Y.....	153
The White Linen Nurse, Eleanor Hallowell Abbott	55	Ulcer, Peptic, Early Diagnosis, Rob- ert Pollock, M.D., San Diego, Cal..	154
Therapeutics, Hoyt	307	United States Civil Service Examina- tions	248
Thomas, F. W.	228	Vaughan, Victor C.	99
Three Years' Work in the Children's Hospital, A Brief Resume. Dr. Chalmers Francis, Los Angeles, Cal.	394	War	263
Throat and Nose Patients, Manage- ment of for Prophylactic and Ther- apeutic Measures in Other Dis- eases. L. C. Ingram, Red Wing, Minn.	66	Watson, Harry G.	149
Travel Study Club of American Phy- sicians	340	We are Going to Double Our Circula- tion	12
Treatment of Chronic Leg Ulcers, Adams	178	What Fools These Mortals Be. H. D. Hyatt, M.D., Kinston, N. C.....	61
Tubercular Meningitis, The Difficulty in Diagnosticating from Gastro- intestinal Diseases, Robert Good- man, M.D., Philadelphia, Pa.....	64	White, J. Francis.....	6
		Whiteside, Dr. John R.....	121
		Wild Life, Conservation of.....	264
		Williams, Edward Huntington.....	285
		X-Ray Studies of Stomach and Colon. Dr. Robert Soiland, M. D., Los An- geles, Cal.	4
		Yates, John C.	332

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INTESTINAL STASIS—CHRONIC. SURGICAL TREATMENT.*

BY REA SMITH, A.B., M.D., LOS ANGELES.

My method of handling the subject of chronic intestinal stasis is based upon the doctrine and experience of Sir Arbuthnot Lane of London, and upon my own experience gained since my return from England, where I had the opportunity of studying Mr. Lane's work in detail. Through the courtesy of Lane I was afforded the opportunity of witnessing the operative work, of being present at X-Ray studies made by Mr. Jordan (his radiographer), and of seeing the actual demonstrations made of pathological and intestinal conditions before operation; also of visiting the wards in Guy's hospital, talking to post-operative patients, and examining records of previous cases.

Lane's experience in the surgical relief of intestinal stasis dates back fifteen years; during that time he has made many changes in technique, and he has developed from this experience

a theory of causation of certain medical and surgical diseases which deserves at least a very careful consideration by us all.

The Lane disease is called by him ileal stasis, which means faulty drainage of the ileum, and is amenable to any treatment which will effectually restore good drainage. The sequence of events leading to this condition is as follows: imperfect support of abdominal contents, prolapse of caecum and terminal ileum, obstruction to terminal ileum, stasis and toxæmia.

The symptoms logically divide themselves into two classes—obstructive or mechanical, and toxic—and while the groups merge in many places, we will try to keep them separate, to simplify a paper which must of necessity leave much unsaid on account of its brevity.

To accomplish perfect drainage of the alimentary canal it is necessary to con-

*Read before the Southern California Medical Society, Los Angeles, Dec. 3, 1913.

pensate for the upright position of the trunk by a requisite number of hours in the prone position. Civilization tends to break this compensation and so starts the chain of events that results in an interference with our drainage scheme. The uncivilized sleep on the ground and lie on the ground when resting, thus preserving the compensation between the horizontal and vertical positions; for there is a tendency for all the viscera to prolapse towards the pelvis in the upright position of the trunk, and to rise up and out of the pelvis in the supine position. As a matter of fact we never do allow the pelvis to empty itself, as the customs of civilization require us to keep the trunk upright for from fourteen to eighteen hours out of each twenty-four, and to use soft beds and pillows during our periods of rest.

The colon is the container, and in the upright position the caecum and ascending colon become heavy from the intestinal contents forced into them from the ileum. Hydraulic pressure exerted from within tires out the muscular walls of the caecum and a dilatation follows, which allows greater accumulation and increased weight, and a sagging downwards and inwards is the result. Nature lays down resistance to this displacement by reduplication of the peritoneum which lift upwards. These become more and more firm until distinct bands are formed, holding up the terminal ileum or appendix, or both. This obstruction of the ileum causes at first a small amount of residual content which furnishes a culture medium for bacterial growth, with congestion and infection of the ileal mucous membrane.

Any increase of weight proximal to the band holding the ileum will increase the kink, and by so doing increase the stasis. In the supine position, on the other hand, the strain will be relieved and the degree of the kink will be diminished.

The well known transient good ef-

fect of the rest cure for neurasthenia is a very good demonstration of the effect of position on intestinal drainage. Perhaps this is an indication of the real cause of the symptoms in these patients who are being passed from the internist to the specialist to the surgeon and back along the line, obtaining never more than temporary relief from their troubles. Another instance just as striking is that of the thin, weak girl who, after the birth of her first baby, develops into a robust and healthy woman. The six or seven months' freedom from toxemia, due to the fact that the prolapsed ileum has been lifted out of the pelvis and held out by the gravid uterus, have given her a chance to regain tissue tone and deposit fat.

The weight of the small intestine increases both from the residuum and from congestion of its mucous membrane, and prolapses into the pelvis, with the result of a pull being developed back to the first fixed point. This point is normally situated at the duodenal-jejunal junction, and the course of the intestine is changed from a gentle sweep from right to left, to a sharp kink.

The kinking of the jejunum at this point causes stasis in the duodenum, followed by dilatation, congestion and infection of the mucus membrane; and also an ascending infection of the pancreatic and biliary ducts which empty into the obstructed duodenum. As a result of this condition we may have duodenal ulcer, pancreatitis, cholecystitis, and cholilothiasis. As a further result of the retention of duodenal contents pyloro-spasm develops, to prevent the return of the duodenal contents to the stomach, and a hypertrophy, followed by dilatation of the stomach, ensues.

The stomach is supported, to a large degree, by the cardia and pylorus, and the descent of the liver brings the strain nearer the cardia and away from the pylorus. As a result of the heavy

dilated stomach and the weight of the sagging transverse colon, strain is thrown on the lesser curvature. Associated with chemical and bacteriological changes in the stomach contents, the mucus membrane becomes congested and a break occurs at the point of greatest strain, with a resulting ulcer. The symptomatic results obtained by gastro-enterostomy and the two ulcer conditions will bear out this hypothesis.

An efficient gastro-enterostomy immediately relieves symptoms in gastric ulcer, but often fails to influence symptoms in duodenal ulcer. The explanation is simple: in the gastric condition the strain is taken off the supporting stomach wall, and the stomach stasis being relieved, the mucus membrane returns to normal.

Gastro-enterostomy may or may not cure duodenal ulcer, depending upon its mechanics. If the site of the new opening in the dependent portion of the stomach is not below the duodenal-jejunal kink, the duodenum is drained and the ulcer heals. With a dilated or prolapsed stomach this point is below the duodenal-jejunal junction, the kink is not straightened out, the mucus membrane remains infected, and the ulcer fails to heal.

It is to be understood that the mechanical factors at work have been aided by the increasing lack of resistance, both as to strain, and infection due to the toxemia that has developed as the drainage has been more and more interfered with. The colon is not essentially an absorbing organ; its mission as the cesspool of the alimentary tract being to collect the effluent from the small intestine, extract the fluid and retain the residue. Toxemia develops very slowly and to a small degree from retention of feces in the colon. The ileum being primarily an organ of absorption, stasis and bacteriological infection of its contents gives rise to a much earlier and more extensive toxemia.

The ordinary symptoms of intestinal toxemia we will pass over, as you are all familiar with the story of the so-called neurasthenic patient suffering from visceroptosis, in whom a greater or lesser number of the mechanical factors just outlined are at work.

Lane has obtained some remarkable and at first unlooked for results, however, in his surgical relief of intestinal stasis. Cases of arthritis deformans and chronic rheumatism have made complete recoveries after colectomy or ileo-colostomy. His case records show that in ten different instances, patients operated upon for a demonstrable intestinal kink had, at the time of operation, enlargements of the thyroid with or without hyperthyroidism. In all of these cases the thyroid tumor and the resulting symptoms disappeared after ileo-colostomy, and had not returned to date, the longest period being three years in a case of exophthalmic goitre.

Lane believes that intestinal toxemia is one of the most important predisposing factors in tuberculous infections, and that by correcting the errors in intestinal drainage he so increases the patient's resistance, especially in bone and joint cases in children, that he obtains a cure without the mutilating operations upon the bones and joints themselves. He also avoids the long, tedious period of suppuration to which our patients are subjected.

The treatment of ileal stasis as laid down by Mr. Lane is both operative and non-operative. The non-operative treatment consists of the application of properly fitted supports to the abdomen, of insisting upon a definite amount of rest in the supine position, and of the internal administration of paraffine.

The operative treatment may be the removal of the appendix when it is the sole offender, or the removal of the appendix and loosening of small kinks in the terminal ileum. Lane's experience in loosening extensive kinks in the caecal region has been disastrous and

this procedure has been attended with a higher mortality than the apparently more radical operation of ileo-colostomy. This is the operation of choice in young subjects, and consists of dividing the ileum proximal to the kink, turning in the distal end, and planting the proximal end into the sigmoid with an end to side anastomosis without clamps.

In subjects fifty or over, colectomy with the anastomosis just referred to is the operation of choice. Colectomy in young persons is complicated by the formation of post-operative adhesions to a much greater extent than the simple short circuit, but Lane has found that adhesions are less likely to form as the age advances, and that after the age of fifty they are rarely troublesome.

In speaking of the results I have but a word to say: The mortality is not prohibitive as has been stated. The records of the woman's ward in Guy's hospital showed 106 ileo-colostomies in

three years, with 58 accompanying colectomies, and of these cases two died of sepsis, one was moribund when operated upon, and one died of pulmonary embolus on the fourth day, a total of four deaths in 106 cases.

The symptomatic results are the most spectacular surgical results I have ever seen—the transformation of a typical neurasthenic complaining patient to a robust, fat and healthy individual with a normal point of view. Since my return from England in July I have had three patients on whom I have performed a short circuit operation, two of whom I had previously operated upon for upper abdominal conditions which had been relieved but not cured. Two of these patients are completely well and changed into normal, happy members of the community. The third one is much improved but the complete cure is still in the making, and I have every confidence that a few more weeks will make the list complete.

X-RAY STUDIES OF STOMACH AND COLON.*

BY DR. ALBERT SOILAND, M.D., LOS ANGELES, CAL.

Röntgenology as now applied to gastro-intestinal researches has rather sharply divided the Röntgen workers into two groups, one division whose members adhere closely to the plate method of diagnosis depending upon the single plate or a number taken serially.

The second group ignores almost entirely this method, but are enthusiastic over the more interesting and also more hazardous visualization investigation, by means of the fluorescing screen.

If one follows closely this work he readily sees good grounds for the existence of these two groups.

The earlier workers, who found by personal experience, the havoc wrought by prolonged fluoroscopic examination with the inadequate protection then at hand, gradually evolved a plate tech-



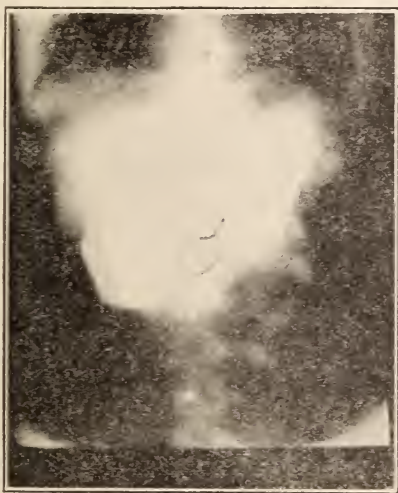
No. 1—Diverticulum of esophagus showing normal stomach below.

*Read before Southern California Medical Society, Hotel Alexandria, Dec. 3, 1913.

nique which has in the hands of a number of brilliant operators become a diagnostic standard.

With modern apparatus and more thorough protection the second division has perfected the screen method to a no less wonderful degree of accuracy.

It may be well here to urge great caution in screen work, for although protective measures may be carefully observed the work is so interesting that much more time than is intended, or even safe, in a given case is permitted. The statement that only one or two milliamperes of tube current is used for



No. 2—Pseudo hour glass contraction of stomach.

these examinations is not always correct, for frequently the meter has been observed to register 5 to 10 milliamperes, when the operator believed he was using only one or two.

No doubt the best results are obtained when both screen and plate are combined, in a manner to arrive at a conclusion, with the least possible amount of X-Ray manipulation.

The question of apparatus: So far it has not been found expedient to use the same tube for both screen and plate, unless one finds that rare combination



No. 3—Deformity of duodenal bulb indicating ulcer.

a good hard tube amenable to instant reduction.

With the Coil type of apparatus, the mercury interrupter is imperative when visualization is desired. For plate exposures the electrolytic breaker is necessary. With the transformer (incor-



No. 4—Filling defect of lower pole caused by infiltrating carcinoma.



No. 5—Impacted transverse Colon.

rectly called interrupterless) the direct current type is superb for plates, but is not so easy of regulation for fluoroscopic screen manipulation. A modern alternating current transformer, however, is much more amenable to regulation for either method.

Cinimatographic or moving picture Röntgenography has been carried to a successful issue by several operators. As it is an expensive undertaking, however, and is quite readily supplanted by the serial plate method, it is not likely soon to come into general use.

As case reports are time consuming they will be omitted from this brief article and in their place a few lantern slide plates will be shown, illustrating in a measure the scope of this work.

It is earnestly hoped that in view of the increasing importance, and general

demand for X-Ray work of this nature, that the clinician will extend to the Röntgenologist all diagnostic assistance possible, in order to render the service of full value to the patient.

Not infrequently the X-Ray operator is placed entirely upon his mettle in a sort of antagonistic attitude by the clinician who calls him to task for many failures in diagnosis.

In an Eastern Clinic, intelligent co-operation between the Clinician and Röntgenologist has during the past 12 months raised the percentage of correct X-Ray diagnosis from 40 to 92 per cent. It is not unreasonable to expect that the same degree of efficiency can be attained here. Criticism, suggestions and a free discussion are invited.

916 Wright & Callender Bldg.



No. 6—Redundant sigmoid in Child
Bismuth Enema.

AUTO-INTOXICATION.*

BY J. FRANCIS WHITE, M.D., SAN DIEGO.

The subject which I have chosen is one so vast that the time allowed for such a paper would be quite insufficient, as is also my personal experience and

knowledge. But, nevertheless, it is one of so much import that I have decided to do what best I may with it. So that, if I may be the means of calling to

*Read at meeting of San Diego County Medical Society, Dec. 16, 1913.

mind some few points which often we are apt to overlook in our busy and varied lives as general practitioners of medicine, I shall consider that my time in writing these lines has been well spent.

The body, as we all know, is a laboratory of poisons. They are with us continuously from the cradle to the grave. The food we eat, the water we drink and even the air we breathe are media for the entrance into our systems of poisons from without. These are only a few of the ways in which we are contaminated.

These are also to be considered the sources of intoxication within the body itself. The great intestinal tract with its intricate passages contains compounds capable of destroying our lives. But thanks to an all-wise Creator we are supplied with the means of defense, by organs of secretion and excretion, which when functioning normally as they do in health, effectually protect us from disease and death. It is only when these organs do not functionate properly that disease manifests itself. What renders possible the development of an infective disease is not the chance meeting of man and microbe. That is constantly taking place, but generally it is without result.

Micro-organisms, even of the most virulent, attack us; we are in constant communication with them, for they are spread around us with the same prodigality that Nature distributes all developing matter, and yet growth is uncommon. Infectious disease is only an accident, because the infectious agent finds only exceptional circumstances favorable to its development. The healthy individual is an unfavorable medium for the microbe; he is markedly resistant to it, and although constantly involved by them, he reacts against them, and in this contest usually overcomes them to such an extent that often the disease does not even become apparent.

It is not thus when his vitality is weakened. Then his means of defense diminish, and organisms hitherto destroyed or held in abeyance multiply rapidly.

It can therefore readily be seen that it requires a modification, antecedent to nutrition, to render infection possible. Disease is thus the result of two different processes, one of which can only act by means of the other. Pathogenic processes are rarely isolated, in the great majority of cases they are associated and combined.

Auto-intoxications are divisible into two groups. First are those cases where the toxic materials originate in cavities which, although they are placed within the body, belong, nevertheless, in a certain sense to the other world.

The second group comprises the diseases in which the processes originate in the innermost mechanism of the body causing disease and even death, as in *Uraemia*, *Icterus Gravis*, etc.

The reaction of a disturbed nervous system may induce temporary disturbance of nutrition by developing a chemical medium favorable to the cultivation of organisms. Thus germs always present, destined to destroy dead matter, are also capable of destroying living matter when they find it in a state of preparation. Nerve reaction, in other words, can produce the morbid opportunity by corrupting the nutrition for the moment. It can also modify nutrition permanently, and develop an acquired disthesis, which once established, may become hereditarily transmissible. With the one exception of syphilis, against which he seems unprotected, it is safe to say that without any preliminary change in nutrition, man is sheltered from infection.

When nutrition is below par we often see such nerve manifestations as apathy, dejection, headache, inaptitude for work, etc., and if we stop to examine the renal secretion we will find incompletely oxidized products of disassim-

ilation in it. These bodies are all toxic, and are the very first signs of poisoning due to previous derangement of nutrition.

As I have already stated, the body is both a receptacle and laboratory of poisons; taken in from the external world, and also created by disassimilation within, and yet man is not poisoned. Thanks to the liver, kidneys, skin, lungs and intestines, which are constantly on guard taking up, modifying and eliminating such dangerous matter as fast as it is formed. The blood stream itself is constantly charged with toxins, which it has gathered up from the tissues to carry on to the excretory channels. But this toxicity never gets beyond a certain limit in the normal individual, for it is constantly being thrown off. The liver protects man by arresting on their way before they pass into the general circulation the poisons brought from the intestines by the Portal vein neutralizing or throwing them back into the bowel again, there to be expelled from the system.

Many of the secretions of the body are themselves toxic, and would be rapidly fatal if not continuously eliminated. The urine for example contains no less than seven toxic substances: a substance which produces salivation, a narcotic substance, one that contracts the pupil, one a diuretic, urea, one that lowers temperature, two convulsive substances, one of an organic nature, urea, and the other a mineral, potass. It is because these substances are carried away through the urine that the urine is poisonous, and that man escapes. All these poisons come from the blood for it is continuously freeing itself from poisons which flow into it, either transferring to various organs, or by consuming them when they are brought into contact with the corpuscles.

The bile, although it is an antiseptic

and antiferment, is also toxic, to an even greater degree than the urine. It is relatively six times more poisonous than the latter. The bile derives its toxicity more from the coloring matter than from the biliary salts, but here we are again protected by the intestinal secretions which precipitate the toxic principles.

The alimentary canal, on account of its great capacity and from the fact that it is being constantly supplied with material in different stages of fermentation and even putrefaction offers a striking example of a receptacle and generator of poisons. There is constantly present in this canal the conditions necessary to the development and propagation of toxins and micro-organisms.

When through perversion of function by disease or otherwise the protective fluids of the Gastro-Intestinal tract are not secreted in normal quantities its contents rapidly ferment, and the organisms hitherto held in check multiply with astounding rapidity.

Stagnation of the abdominal contents as seen in dilation of the stomach, motor insufficiency, the various ptoses or mechanical obstruction to the free passage of food through the intestinal tube is a fruitful source of supply of toxic material. Dietary errors caused by over-indulgence in, or the use of improper food or insufficient mastication of the same likewise bring about conditions favorable to the formation of toxins.

Depressed conditions of the nervous system lead to constipation and auto-intoxication and the latter condition in turn aggravate the nervous state and we have a vicious circle established.

Any foci of suppuration, pyorrhoæa alveolaris, decayed teeth, sinus trouble, infected tonsils, a suppurating lymph node, a chronic appendix, anything in fact which would tend to lower the body tone and interfere with the nor-

mal functioning of the organs of assimilation and elimination are also common causes of auto-intoxication.

In regard to the treatment we should seek the cause and endeavor to remove it. In general it resolves itself under five heads. Prophylactic dietetic, hygienic, medicinal and surgical.

Under the head of prophylaxis we may require the aids of the dentist and surgeon. We must regulate the food supply as to kind and quantity, limiting the amounts to just what is required to suit the individual case, having the patient take sufficient time to masticate thoroughly. He must spend a reasonable time in exercise, use plenty of water internally and externally and pay strict attention to the calls of nature.

For constipation, I am in the habit of using the salines in decreasing doses in cold water on arising, gradually lessening the amount of the sa-

line, but continuing with the fluid, as the condition improves, laying particular emphasis upon the necessity of persistence and regularity in the time of stool.

The daily morning bath tempered to suit the case followed by a brisk rub and setting up exercises is an excellent tonic and a good way to begin the day. Fruits and the use of cereals or coarse bread are also helpful in overcoming constipation. Some do better with hot water as a beverage before breakfast, to which may be added a little lemon juice. We must take plenty of time in the handling of these cases and give them explicit directions in regard to their daily life. We must evince an interest and gain their confidence if we would be successful in the management of this class of patients. There are plenty of them and they are always grateful.

THE ROENTGENOLOGIST AND THE CLINICIAN.

BY WM. B. BOWMAN, M.D., LOS ANGELES.

I have been asked by the Editor of the Southern California Practitioner to give my impressions as to the real value of the Roentgen or X-Rays as used in medicine based upon observations made during a recent visit to the medical centers to the east of us.

Physicians in general are at last beginning to realize the importance and value of the Roentgen Ray examination, not only in bone work, renal and ureteral calculi, etc., but it is now becoming a routine procedure in the large clinics as an aid to diagnosis in obscure lung and chest conditions, gastro-intestinal disorders such as ulcers of the stomach and duodenum, pyloric stenosis, ileal stasis, chronic constipation, cancer and malignant growths of the gastro-intestinal tract, etc. The ear, nose and throat specialists are beginning to see the advantage of having the assistance of the Roentgenologist as an aid in the

diagnosis of sinus, antrum and mastoid conditions. Dentists, too, are also beginning to realize that Roentgenograms are a most important factor in the diagnosis of puzzling and obscure conditions of the teeth and oral cavity; in fact, it is becoming an accepted fact that the Roentgenologist is a very useful man to have around as a consulting specialist.

American Roentgenologists in general have been a little slow to enter the field of fluoroscopy on account of the danger to themselves of obtaining an X-Ray burn, but now they are gradually taking up that line of work as they feel that the new apparatus and protection devices offer them the desired protection. At the present time some wonderful work is being done and in the future Roentgen Ray findings will be indispensable in examinations of all parts of the body when taken in con-

junction with the clinical symptoms which present themselves.

In my estimation the Roentgenologist should be looked upon as a consultant, and after the examination of a given case, there should be a consultation between the Clinician and the Roentgenologist, both the clinical and X-Ray findings being discussed and in that way it will be possible often to arrive at a very much more accurate diagnosis.

As in clinical cases, certain conditions give certain definite shadows both upon the fluoroscopic screen and the X-Ray plate and if at times the X-Ray seems to be at fault, it will be well to bear in mind that the trouble may possibly be in the interpretation of the picture and not in the shadow itself.

A brief description of the kind of machines used will probably be of interest. There are three or four good makes of fluoroscopes or radiosopes as they are sometimes called, the chief difference being in the protection furnished the operator. There is only one machine which seems to me to provide absolute protection from all rays. The price of this machine, however, is prohibitive to the majority of physicians.

The other makes are more reasonable in price, but afford less protection. Just whether or not the protection furnished on the cheaper apparatus is sufficient, only time will tell, but I believe if the operator does not become careless, and takes the ordinary precaution of wearing lead gloves and apron, there is practically no danger.

The trochoscope or horizontal fluoroscope finds its use in the direct inspection and study of the colon with the aid of opaque enemata.

The most satisfactory machine for the excitation of the tube in fluoroscopic work is a coil with mercury interrupter, however the mechanical interrupter is used by some who report very good results.

In some clinics where a great number of patients are being examined every

day the interrupterless type of machine is used. In the Massachusetts General Hospital, Boston, and in the Mayo's Clinic, Rochester, Minn., the last named apparatus is being used in fluoroscopic work and in both places the operators seemed to be satisfied with the results obtained.

In the study of the gastro-intestinal tract, Cole of New York uses the fluoroscope only to locate the position of the stomach, after this he takes an indefinite number of Roentgenograms of the stomach or intestines as the case may be, and by a careful study of the plates makes his diagnosis. This he calls serial radiography. George of Boston, I believe, is also an advocate of serial radiography, but it will hardly come into general use on account of the expense occasioned by the great number of plates necessary for a diagnosis. By a combination of the two methods, viz., fluoroscopy and serial radiography, one can obtain not only the information shown in the plate, but can also study peristalsis and mobility of the stomach and intestines, as well as determine the presence or absence of adhesions.

By the combined method one is enabled to study the case by means of the fluoroscope and record and study the findings from the plate. In this way one can obtain the best information at the minimum expense.

Of the clinics visited, the best work in fluoroscopy is, in my estimation, being done by Carman of Rochester, Skinner of Kansas City and Case of Battle Creek.

The work being done at the Mayo Clinic by Dr. Carman is of particular value as most of the cases are later operated upon, and one has the chance of observing the case, first in the X-Ray laboratory and after in the operating room and seeing the diagnosis either confirmed or disproven.

This, of course, makes the Roentgenologist more conservative and for this reason I believe the work there to be

more accurate than elsewhere. It must be remembered, however, that both Carman and Case are working for institutions whose financial resources are unlimited.

Skinner of Kansas City has not this advantage, but notwithstanding this fact he is doing most excellent work, and has developed a technique of great value which has the advantage that it can be carried out at a comparatively moderate cost.

The Roentgen ray also plays an important part in the diagnosis of mediastinal tumors, tumors of the chest, pleural effusions, empyemas, aneurism, etc.

Roentgenology has taken its place as an indispensable aid to the practice of both medicine and surgery, but in order to get the best results a considerable armamentarium and a high degree of technical skill is necessary. It is hence justly to be considered as a specialty and in this age of specialization the Roentgenologist must play his part, and this is by no means a small one.

815-816 Brockman Bldg.,
Los Angeles, Cal.

ABSTRACT OF PAPER READ BEFORE OREGON STATE MEDICAL ASSOCIATION.
Medford, Oregon, Sept., 1913.

By E. B. Pickel, M.D., of Medford.

After hurriedly passing over the various classifications of nephritis from the exudative forms of Bright, through the clinical classification of Rayer, the pathogenic of Rokitansky, and others, the author concludes the question to be unsolved, and that any attempt to change the old nomenclature as adopted by Senator, Bradford and Herrick, is a task of Herculean proportions.

The etiology is held to be an unsettled question, with the toxin of some micro-organism in the ascendancy, while a gastro-intestinal toxæmia is an im-

portant factor and heredity a predisposing cause in many cases.

The desquamative stage of scarlatina is in a class by itself as a cause of an acute diffuse type of Bright's disease.

In the symptomatology and diagnosis, the author holds albuminuria to be the cardinal symptom, and lays especial emphasis on the importance of differentiating between the albumen due to contamination of the urine after leaving the kidneys and that of true renal origin. High blood pressure is spoken of as a symptom common to all forms of the disease, but caution is given that other diseased conditions may also show a high record.

The different eliminative tests for the diagnosis are mentioned, but their infallibility is questioned; yet, the plithalein test of Roundtree and Geraghty is considered worthy of use.

In the treatment of all forms elimination is the watchword, with a restricted salt diet in the exudative forms. Care for the heart and vascular system and improve metabolism.

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EDITORIAL

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THE SNOW AFFAIR.

The resignation of Dr. Snow as Secretary of the State Board of Health has caused considerable comment. In the December issue of the Practitioner, we presented the Board of Control view of the matter, and we are glad now to lay before our readers the affair as viewed by our State Board of Health, together with some of our own investigations in the matter.

Statement by the Board of Health.

"There are only two questions in this whole matter. One is personal as concerns Dr. Snow. Is it a fact that he is a perjurer, that he was 'short in his

accounts' and that he committed 'a felony?' Has anyone the legal right to so charge him in the public press?

"The other concerns the Board of Health of the State of California; it is: Has the Board of Control the right by law or can it assume the authority to so interfere with the Board's conduct of public health as to nullify its actions and to so stultify it in its relation with similar state health authorities and with the public in general?

"These are the only questions, there are no others and no attempts to obscure the issue by misrepresentations or abuse will be of any avail.

"The issue rests primarily with the Governor and secondarily with the people of the State of California to whom this Board of Health has rendered gratuitous service for the past ten years.

"WHEREAS, Statements have been made in the public press that tend to imply that official difficulties which Dr. W. F. Snow, formerly Secretary of this

Board, has had with a co-ordinate branch of the State government are the only basis of dissatisfaction on the part of the Board, and

"WHEREAS, Such an implication is absolutely foreign to the facts of the case;

"RESOLVED, That the formal communication signed by all the members of the Board and ordered transmitted to the Governor at the regular meeting of November 1st, 1913, be furnished to the public press."

For some time the Board of Control seems to have used its supervision of finances as a sort of club to direct even in minute details the activities of the State Board of Health. This is in contravention of the former plan of permitting the State Board of Health to direct its own affairs so long as it kept within its legislative appropriation. The trip of Dr. Snow to Washington, which later led to his resignation, was made in obedience to resolutions passed by the State Board of Health August 20, 1913. The purpose of the trip was to obtain an increase in the federal appropriation in connection with plague work and the estimate for the expenses of the trip, \$257.50, was submitted to the Board of Control and returned with the following statement:

"As the policy of this Board has been to discourage all trips of State officers during the first six months of the Biennial Period and as this policy is consistent with all our rulings previously made in this regard, we are returning the estimates without our approval."

It would seem that the Board of Control could not recognize the urgency of the plague situation nor the necessity for the increased appropriation by the national government except during certain "biennial periods," a policy that approaches the height of the ridiculous.

August 20, 1913, the State Board of Health arranged to send Dr. W. A. Sawyer, Director of the Hygienic Lab-

oratory, as its representative to the annual meeting of the American Public Health Association at Colorado Springs. The estimate of the expenses of the trip, \$110.00, was rejected by the Board of Control under its "biennial periods" ruling. It is unfortunate that the American Public Health Association cannot faithfully observe this State's "biennial periods" when arranging for its meetings. Dr. Sawyer had been invited to read a paper on "The Prevention of Carriers," a subject with which he has gained national repute through his excellent work in connection with the "typhoid carrier" Olsen.

December 6, 1913, our State Board of Health resolved to send Prof. Jaffa, Director of the Food Laboratory, to Washington as its representative at the meeting of the National Committee on Cooperation between the state and federal government. The Secretary of the Department of Agriculture had especially requested that Prof. Jaffa be sent to this meeting, since he was one of the three state representatives on the National Committee of five. The estimated expense of the trip, \$280.00, was rejected by the Board of Control under its "biennial periods" rule. Ridiculous.

In June, 1913, the State Board of Health filed estimates for printing new editions of the Food and Drug Laws, of a pamphlet on rabies and of one on water supply and sewerage disposal. These were held until after the fifteenth of the month in order to include the new acts approved by the Governor. The estimates were then sent to the Board of Control, by whom they were approved upon condition that the cost be charged to the succeeding "biennial period." This meant the transference of \$1628.30 from the funds provided by the Legislature for the maintenance of the State Board of Health to the general fund of the State, really a miscarriage of funds on an erroneous basis that may well convey a false impression.

The interference of the Board of Control has extended to many of the minor activities of the Board of Health, thus tending to hamper its work. In March, 1913, a page of copy from the monthly bulletin was returned with the statement: "We have cut out the enclosed report of the Executive Division, copy No. 15, as we do not believe matter of this kind should be inserted in your monthly bulletin." A re-submission of this copy with an explanation of its purpose, and the fact that it has been regularly published for more than a year, met with the same reply. The cost of publishing the page amounted to \$2.00.

From this it would appear that the Board of Control assumed the position of editing the State Board of Health's bulletin.

August 23, 1913, the State Board of Health submitted an estimate which included the item: "inspecting and oiling adding machine, \$2.50." This was returned with a lucid explanation: "You will note that we have stricken out the items of expense inspecting and oiling adding machine, \$2.50." The following month this item was re-submitted with the explanation that the accuracy of adding machines is not guaranteed unless the manufacturer cleans and oils them, and it was then allowed without comment.

The following is from the communication to the Governor by the Board of Control one year ago, January 6, 1913:

"An audit of the accounts of the State Board of Health for the period beginning July 1, 1909, and ending June 30, 1912, has disclosed certain discrepancies and methods of doing business which it is deemed proper to call to your attention. As a net result of the audit, Dr. W. F. Snow, Secretary of the Board, has been required to return to the funds of the State Board of Health a total of \$705.47 to cover discrepancies. At the outset it is the duty

of this Board to make plain to you that although the Secretary had to return this amount, there is no suggestion of any criminal action on his part. The returning of this money by Dr. Snow is the direct result of the vicious system of transacting State business which had grown up in so many departments and institutions.

"Some idea of the inefficiency of the old methods and the confusion arising therefrom can be had from a knowledge of the fact that it took expert accountants the greater part of three months to reconstruct the records of the State Board of Health for the period of audit. In many instances the records were absolutely worthless, admitting of no check or counterecheck and presupposing as a part of the system an accurate memory on the part of the person in charge.

"The discrepancies making up the total of \$705.47 cover the entire period of audit. There are so many and they are of such a variety that a recitation of them would be in effect a duplicate of the report of the audit by the accountants. Therefore, a copy of the report is hereto attached and made a part of this special report. Steps have been taken to properly formulate the business methods of the State Board of Health and to prevent recurrence of the discrepancies and confusion which have arisen under the old system. Of the amount returned by Dr. Snow, \$329.14 has already been deposited to the account of the State Board of Health in the California National Bank. Herewith transmitted to you are a certified check for \$350.00 and a check on the bank of Palo Alto for \$26.33 to cover the balance of the discrepancies."

The above communication is most decidedly deceptive, to use extremely mild language, and is not especially complimentary to our State Board of Health and its former Secretary. As a matter of fact if no audit had been made, this State would have been ahead over

\$100.00 which Dr. Snow would have been out of pocket. It is interesting to note that the basis for this letter is stated by the Board of Control to have required the work of an expert for three months at a cost of \$700.00. It is unfortunate that there should be friction between the State Board of Control and the State Board of Health. The members of the State Board of Health serve without compensation, giving freely of their time and experience and guarding the public health of California, and deserve at least fair treatment at the hands of the politicians.

TUBERCULOSIS NURSES.

The free use of tuberculosis nurses during the past few years has proven the most effectual means of reducing the mortality and morbidity from that disease. Employing 165 tuberculosis nurses, New York City reduced the number of cases of tuberculosis from 32,065 in 1910 to 22,752 in 1912. The death rate from pulmonary tuberculosis in Manhattan and the Bronx fell steadily from 427 per hundred thousand of population in 1881 to 190 per hundred thousand in 1912, a reduction of fifty-five per cent. In a personal communication Dr. Hermann M. Biggs, the General Medical Officer of the City of New York, states that "one of the most important features of the administrative control of tuberculosis consists in the continued supervision of the cases by nurses. In this city, we thus supervise all such cases under the care of private physicians and these we keep track of by writing to the physicians several times a year asking whether the patient is still under his care and, if not, whether he has any objection to our attempting to trace the whereabouts of the patients.

"The ends sought to be accomplished by having a nurse visit the patients in their homes, are several. In the first place, accurate information is required

concerning the home conditions, that is, the number of rooms, sanitary condition, income of the family, etc.

"In the second place, we attempt in this way to secure knowledge of other cases. The nurse makes careful inquiries concerning the other members of the family and urges that all of the members of the family visit the tuberculosis clinic of his district in order to ascertain whether or not they are infected. In this way, early cases are often brought to light and these, of course, are then offered sanatorium care.

"Still another end in view, is to trace, if possible, the source of the infection and to discover whether the patient originally reported is a primary or secondary case.

"The work of our tuberculosis nurses has been so eminently successful that we do not see how any effective tuberculosis work can be carried on without them."

Following this lead, a number of eastern cities, notably Buffalo, Cleveland, Boston and Baltimore, have markedly increased their number of tuberculosis nurses. After studying the local condition, in Los Angeles, it would seem that we ought to have about the same number as Buffalo, seventeen (a head nurse and sixteen nurses). At present Los Angeles has only one tuberculosis nurse.

In 1911 Buffalo had a population of 435,315 and the deaths from pulmonary tuberculosis numbered 500. Buffalo at that time had the corps of tuberculosis nurses, for which Los Angeles is now pleading and was seeking better hospital facilities for the few remaining cases. Under the circumstances it is interesting to note the following from Health Commissioner Fronczak's annual report:

"Can we continue to lose 500 people annually—men and women who otherwise ought to be the very flower of humanity, because the tax rate is liable

to be somewhat increased. Philanthropists, scientists, physicians—all who have studied this question—have been pleading with your honorable body for years. For God's sake, how long do you want to continue to be urged? How many thousand more are to be sent to premature graves?"

Los Angeles is now losing more than twice as many from pulmonary tuberculosis as Buffalo was losing in 1911. Would that we had a Fronezak to talk plainly to our City Fathers.

SANTA BARBARA'S COTTAGE HOSPITAL.

Less than five years ago the Cottage Hospital was an unsatisfactory institution in miserable old buildings, the attendants consisting of four nurses. Mrs. Laura Mitchell was then called in as superintendent of nurses and soon infused the work with new life. She immediately gained the confidence of the medical profession and with their co-operation secured gifts and bequests sufficient to erect a model building cost-

ing over one hundred thousand dollars. This building was furnished and opened last summer. There is now an excellent training school with over twenty pupil nurses. Santa Barbara was certainly to be congratulated. Mrs. Mitchell after this long strain had an attack of sciatica and went to Arizona for rest and recuperation. While there she received notice from the female board of managers—consisting of seven members—that she was discharged. This notice gave no reason. The physicians of Santa Barbara—with one exception—signed a petition asking the board to rescind their action, but all to no purpose. The result is that the worst is feared in regard to the future of the Cottage Hospital. Mrs. Mitchell is president of the California State Nurses' Association and a woman of remarkable executive ability. We trust that her successor will be as capable and that all will go well. Meanwhile any institution needing a superintendent will do well to correspond with Mrs. Mitchell, care Dr. Rexwald Brown, Aiken Building, Santa Barbara.

EDITORIAL NOTES

Dr. Lewis B. Morton has removed to 1012 Brockman Building.

Dr. Henry Dietrich has moved to Suite 915-919 Brockman Building.

Dr. Edward Swift has his offices in the Security Building, Los Angeles.

Dr. Theodore Gawn Finley announces the removal of his offices to 509 Brockman Building.

Drs. Walter V. Brem, A. H. Zeiler and Clarence E. Ide have located in the Brockman Building.

Dr. Edwin W. Earing has located his offices in Suite 719 Marsh-Strong Building, corner of Ninth and Main streets, Los Angeles.

Dr. John Carling has removed his offices to the Black Building, corner of Fourth and Hill streets, Los Angeles.

Drs. Theodore Gawn Finley, Thomas J. Orbison and Lewis B. Morton have taken offices in the Brockman Building.

Very fine office with use of reception room and laboratory. Apply to Dr. C. H. Whitman, 816 Wright & Callender Bldg.

Dr. Arnold Burkelman and Dr. Wilbur W. MacKenzie now have offices in the Los Angeles Investment Building, corner of Eighth and Broadway.

Office for rent on 9th floor of Los Angeles Investment Co. Bldg., in suite with five other doctors. For particulars, write or phone Dr. M. M. Armstrong.

Drs. Caesar G. Cahen and Donald J. Frick have taken offices in the Brockman Building. Dr. Cahen has recently spent several months in hospital work abroad.

Dr. E. H. Wiley has been appointed police surgeon by the Los Angeles City Council. Dr. Wiley has appointed Dr. Adolphe Edward Roome as his first assistant.

Dr. E. Avery Newton, formerly of Bad Nauheim, Germany, has located in Los Angeles with offices in the Marsh-Strong Building, corner of Ninth and Main streets.

WANTED—2nd-hand instrument cabinet and other office furniture. Describe fully. Address Medical & Surgical Instruments, care of Southern California Practitioner.

Dr. D. P. Fredericks, recently of San Francisco, has located in Los Angeles with offices in the H. W. Hellman Building. Dr. Fredericks specializes in eye, ear, nose and throat.

Doctors H. H. Koons, D. W. Edelman, Ralph R. Campbell, Henry Dietrich and Horace Heath have all taken offices in the Brockman Building, corner of Grand avenue and Seventh St.

Dr. John A. Colliver of Los Angeles has concluded seven weeks' work in the Great Ormond Street Hospital for Children in London, a short time in the children's hospitals in Paris and he is now spending three months in Vienna.

Dr. W. H. Stearns, a well known Los Angeles practitioner, died of pneumonia at his home December 16th. Dr. Stearns graduated from the University of California (Los Angeles) 1899. He was a good citizen and an excellent physician.

The California Hospital Nurses' Directory, 137 North Carondelet street, now in its seventh year, is always ready, night or day, to supply nurses. Any money over and above expenses that this directory may receive goes into the Sick Fund for graduate nurses.

Dr. E. L. B. Godfrey of Pasadena died suddenly of angina pectoris at his home Wednesday, December 17th. He graduated from the Jefferson Medical College, class of 1875, and had lived in Pasadena for fourteen years. The interment was at his old home in New Jersey.

Dr. F. K. Ainsworth, chief surgeon of the Southern Pacific Company, was recently operated on for appendicitis at the Southern Pacific Hospital, San Francisco. Dr. Ainsworth's many friends throughout the state will be glad to know that he made a prompt recovery.

Extra good location for physician in apartment and rooming house district. No other doctor within four blocks. Two nice light connecting front rooms (4 windows); both phones, gas, electricity, etc. Five minutes to Broadway and Third streets. Inquire at Hotel Belvedere, 820 W. 3rd St. Broadway 6981, A-4307.

Dr. Clarence Moore has returned after spending two months in Eastern hospitals. Dr. Moore also took occasion to attend the Southern Surgical and Gynecological Association at their annual meeting in Atlanta, the annual meeting of the Western Surgical Association in St. Louis, and the American College of Surgeons and the Clinical Congress of Surgeons in Chicago.

The Mayor of Santa Monica has appointed Dr. W. H. Parker Health Officer, Dr. J. L. Balsley member of the Board of Health, and Dr. A. P. Williamson member of the Library Board. Dr. Balsley graduated from the medical department of Northwestern University, class of 1900; Dr. Parker graduated from the University of Buffalo, class of 1881, and Dr. Williamson from the Hahneman Medical College, Philadelphia, class of 1876.

Dr. A. Harlan Currie was host Monday, December 8th, at a dinner at the

Mission Inn that he gave to the Riverside County Medical Society. After the delightful dinner the annual meeting of the society was held. The following officers were elected: President, Dr. J. H. Holland; vice-president, Dr. E. H. Wood; secretary and treasurer, Dr. G. E. Tucker. Dr. H. R. Martin was elected delegate to the State Medical Society with Dr. John C. King as alternate.

Dr. D. H. Currie of the United States Public Health Service was elected secretary of the State Board of Health at a meeting of the board to fill the vacancy caused by the resignation of Dr. W. F. Snow. Dr. Currie was recently appointed a member of the State Board of Health. He is 38 years of age, graduated from the Washington University, St. Louis, class of 1907, and has done much work at the Leprosy Investigation

Station in Honolulu. The position pays \$3600 a year.

Competent physician wants location in Southern California; ten years' successful practice in East. Prefers town 1000 to 3000, with good territory; will buy office equipment, and may buy small property, if priced right. Give full particulars. Address Dr. B., care Southern California Practitioner.

Office for rent: Private office with use of elegantly furnished reception room. Telephone, attendant. 612 Brookman Bldg., corner Seventh and Grand Ave., Los Angeles, Cal.

STUDENTS MUST BE VACCINATED.

The appellate court of California has handed down a decision upholding the stand taken by the University of California authorities that every student registered at the institution must submit to vaccination.

TUBERCULOSIS NOTES.

Some Recent Views on Mixed and Secondary Infections in Pulmonary Tuberculosis.

J. L. POMEROY, M.D., MONROVIA, CAL.

So much speculation and confusion exists as regards this problem that any new work of a reliable character is important. It is probable that vaccines of varying constituents (bacillary) are used to a more or less extent by the profession in general in the treatment of colds and bronchitis in tuberculous patients and others. The work of J. A. D. Radcliffe [in the *Zeitschrift für Tuberculose*, Bd. 21, Heft 1 and 2, p. 24-45, Heft 3, p. 258-287] is doubly interesting from a bacteriological as well as a clinical standpoint. To anyone deeply interested in this subject this article is highly recommended. The expression "mixed infection" has now become, in the mouths of most enquirers,

a generic term, implying either a simultaneous, or a secondary settling of two or more pathogenic bacteria in the same body. But as a matter of fact we have little knowledge of any simultaneous invasion of the lungs by the tubercle bacillus and any other organ in symbiosis and consequently the settling of two or more microbes in the lungs, at a later date than the tubercle bacillus, must be by far the more important. Radcliffe therefore prefaces his article by the following distinctions: First, a true mixed or simultaneous symbiotic infection. Second, a true secondary infection in which the infection by the tubercle bacillus is subsequently complicated by the presence of one or more

Footnote—Dr. Pomeroy has kindly consented to furnish these Tuberculosis Notes as a special Department of the Southern California Practitioner.

infecting organisms. Thirdly, an accompanying infection—by which is meant a purely tuberculous process in the lung, with a subsequent infection of some other portion of the lower air passages by another microbe or microbes. The tuberculous process is influenced only indirectly by the weakening of the general forces of the body.

Fourthly, an intercurrent infection, such as a typical lobar pneumonia. In this regard it may be remarked that Lawrason Brown does not accept Barnes' statement that pneumonia is as frequent among tuberculous individuals as among the general population of the same age. Brown believes that it is probable that purulent infection is more frequent among the tuberculous than we realize, pointing out that while symptoms of abscess are unusual bronchoculosis may and does follow pulmonary tuberculosis. Brown also shows that secondary infections (in the sense of intercurrent disease) may seriously influence the tuberculosis by weakening resistance. He shows the effects of vaccination on 42 patients at the Adirondack Cottage Sanitarium. It was effective in 24. Patients in the incipient stage suffered no ill effects, but of the remainder six were more or less seriously affected and some were never so well. More recently two former patients in a moderately advanced stage, have suffered relapse, following effective vaccination. The writer knows of several patients in a large sanitarium in Southern California where it became necessary to vaccinate the entire clientele, who had a severe increased activity of their pulmonary lesions and have never really gotten back into as good condition as before vaccination.

It is stated, however, that intercurrent diphtheria when treated with antitoxine has no deleterious effect on tuberculous patients. A patient with pulmonary tuberculosis in an early stage may go through an attack of typical

lobar pneumonia with little or no direct effect on the tuberculous condition.

To come back to Radcliffe's work. After a careful review of the literature he summarizes as follows:

It seems generally accepted that secondary infections do occur in a certain percentage of cases of pulmonary tuberculosis, although some authors deny any importance to such infections and regard the tubercle bacillus as the important or only factor in the disease. Those who agree in ascribing some significance to the secondary infections differ widely, however, on the question of the frequency of occurrence, whilst as to the part played by secondary infections in the production of clinical phenomena, there is still more marked divergence of opinion.

It has been definitely proved that many of the acute exacerbations which are usually due to pneumonic processes can be produced by the tubercle bacillus alone (Fränkel, Troje and Sörgo,) whereas others may be the result of secondary infections. It is apparently impossible by clinical observations to distinguish between these two conditions. It is to be noted that the majority of writers have not in any way separated the true secondary and mixed infections from the accompanying infections, and all are classified together under the generic term "Mixed Infection." This has undoubtedly confused the issues and gives rise to unnecessary difficulties. It is now generally admitted that a purely tuberculous fever exists, and that pyrexial pulmonary tuberculosis without mixed infection occurs. The idea that fever is always an expression of a mixed infection has been gradually given up. Sörgo also protests strongly against the usual method of ascribing every febrile attack to the action of secondary infections with pyogenic cocci, and points out the variety with which definitely Septic (Joint, heart affections, etc.) are met with in the course

of pulmonary tuberculosis, even when the hectic stage has persisted for a long time. The pathogenicity of the organisms found in the sputum has also been carefully inquired into, but even if pathogenic bacteria are found, it is now well known that virulent bacilli may persist in the throats of various individuals without giving rise to disease.

Their presence is important in this respect, however, that an intercurrent affection resulting from one of the pathogenic cocci may unfavorably influence the progress of the tuberculous process. Even with the use of the newer immunity reactions, the opsonic index, the agglutination and complement fixation methods, it is not possible to differentiate between a true secondary infection of the tuberculous focus, and an infection of some other part of the respiratory passages such as bronchitis, although the latter may well exist without in any way influencing the coexisting tuberculosis.

Radcliffe concludes therefore: "It would seem necessary to approach the question again from a bacteriological standpoint, and to devise if possible some technique for the examination of the sputum which would seem less open to error than that of Kitasato. For this purpose the method evolved by Sörgo avers advantages over the methods usually employed." The patient was instructed to cleanse carefully the mouth and teeth with a mild antiseptic and the morning sputum was then collected in a sterile Petri dish. The further investigation was carried out as soon as possible after the specimen reached the laboratory and in all cases only a few hours elapsed between the collection of the sputum and its examination. The sputum so obtained was washed by transferring it to a beaker of sterile salt solution, and vigorously moving it about with a sterile platinum needle. Having been treated with six changes of sterile salt solution it was

finally removed to another sterile Petri dish. Cultures were then prepared according to the ordinary methods of bacteriological procedure.

Twenty-four cases were examined grouped as follows: (Turban Gerhardt) Group I—2 cases. Group II—10 cases. Group III—12 cases. Six of group II and eleven of group III were all permanently febrile and many were confined to bed. All of the other cases were afebrile and able to take exercise. From all of the cases streptococci were obtained in the cultures and no differences could be made out between the afebrile and febrile cases, as far as the numbers of streptococci present in the sputum were concerned. The mere presence of organisms of this class in the sputum is not sufficient to establish them as secondary infections. In the majority of cases microbes other than streptococci were also present. In all, forty-two strains of streptococci were examined and in addition fourteen strains of staphylococci, three of micrococcus tetragenus, four of Grani negative cocci and four of bacilli.

Radcliffe made a special study of the bio-chemical reactions as suggested by Gordon for differentiating the streptococci and staphylococci present in health and disease. As a result of his study the following questions were formulated and answered:

First. Is any microbe frequently present in the sputum in association with the tubercle bacillus? Conclusion: Streptococci are present in the sputum in every case whilst other bacteria are not invariably present, though they are of fairly frequent occurrence. So far as bio-chemical means could show, no constancy in the variety of the organism could be demonstrated.

Second. There was no difference in the bacterial flora of the sputum in the febrile and afebrile cases.

Third. The majority of the organisms were indistinguishable from the

ordinary bacterial flora of the mouth and throat. Some of the organisms gave bio-chemical reactions characteristic of pathogenic varieties—but this gave no information as to whether they were a source of infection in the given cases.

Radcliffe then attempted by the use of the opsonic index and the subsequent use of vaccines prepared according to Wright's method, to divide the sputum bacteria into two classes—those which were causing secondary infection and those which, although present, were not taking share in the infective process. The opsonic curve was studied in six advanced cases as well as the clinical condition. Clinically these cases were considered to represent what is usually regarded as a secondary infection. A complete protocol of the experiments and clinical course is given with each case.

The points brought out may be summarized as follows:

1. All the cases in which opsonic curves for secondary bacteria were plotted out, seem to show sufficient fluctuation of the index from the normal limits to point to the presence of a secondary infection.

2. In all cases except case 2 no effect was produced on the clinical condition, or on the course of the disease by autogenous vaccine treatment in spite of the fact that the opsonic curve showed that an immunizing response had been brought about.

3. Vaccine treatment was not any more successful in those cases in which an opsonic index was used as a control than in the cases in which the temperature and general conditions were relied on as guides.

4. In only one case out of six (Case 2) could a secondary infection be definitely assumed and in this case both general condition and opsonic curve showed a marked response to the inoculation of a mixed vaccine.

While Radcliffe states that he must conclude that secondary infections do play a part in a certain number of cases of pulmonary tuberculosis (one out of six in his series), still the mere presence of organisms in the sputum does not prove any connection between them and the process in the lung; the temperature curve is useless in determining the presence or absence of a secondary infection; furthermore, no marked help was to be had from a study of the opsonic index or any other immunity reactions. While a departure from the normal shows infection, it does not indicate that the infection is a secondary invasion of a tuberculous focus.

He is forced to conclude that the tubercle bacillus is the essential and important agent in pulmonary tuberculosis and can produce all the varied clinical and pathological phenomena associated with the varied phases of this disease—and that secondary infections play only a minor role in a small percentage even of advanced cases.

Next follows a study of the blood for secondary infections in 22 patients—advanced febrile cases. In twenty no growth was obtained in culture. In one of the remaining two cases a streptococcus was found, unquestionably due to an infective endocarditis. In the remaining case a staphylococcus was found in the blood, a vaccine prepared and given with some benefit to the patient.

Radcliffe concludes that a true septicaemia was a very rare occurrence in advanced febrile cases of pulmonary tuberculosis even a short time before death. In twenty-one cases (excluding the case of infective endocarditis) there was evidence of the presence of a secondary organism in the blood stream only once, and even in this he was not completely satisfied that every possible chance of contamination had been avoided.

Part IV. Radcliffe now took up the study of the sputum in a more detailed way, following a technique first introduced by Sorgo. The essential character was the breaking up of the sputum into flakes by whipping it in Petri dishes filled with sterile saline solution—transferring the largest flakes through a series of dishes until all necrotic matter had been washed loose—and finally selecting from the remaining small white flakes material for culture. The advantages of this special technique is the getting rid of necrotic material which is always invaded by numerous bacterial flora, which have no pathogenic influence on the given case. He also recommends a modification of Dorset's egg media for growing delicate organisms. It is claimed that this thorough washing does not affect the bacteria existing in the sputum mass, but only rids it of the possible organism contaminating the surface.

He discusses thoroughly his sources of error and endeavors to overcome them. His research is wholly concerned with the bacteriological examination of the sputum of advanced cases of lung disease in which intermittent or continuous fever had been present for a long time and in which the febrile condition had not been influenced by sanatorium treatment. The study included forty-seven cultural examinations of the sputum from 33 patients. In 25 cases a secondary infection could be excluded. In five cases a secondary infection was definitely proven. In one of these it is interesting to note that during the administration of urotropine for another complaint the secondary infecting organism, influenza bacilli, disappeared from the sputum—to reappear after the treatment was stopped. The author paid no special attention to this until some six months later, when his attention was called to the matter by a paper by Zak in the *Wien Med. Wehschr.*, 1912, Nr. 4, who found that urotropin

was excreted by the lungs and exercises there its antiseptic action. One patient showed marked temporary improvement under vaccine treatment. All these cases died, showing that no great success can be expected even if the causative bacteria of the secondary infection be found—as death occurs from the advanced tuberculous disease.

From this series he concludes that accompanying infections do occur in a number of cases of pulmonary tuberculosis and may give rise to symptoms. They can be distinguished from true secondary infection by bacteriological methods and may be amenable to treatment by specific vaccines.

Radcliffe then considered preventive and curative measures. In regard to modes of entry of the bacilli, the secondary infection most probably gains entrance into the lung through inhalation. The fine spray produced in speaking and coughing is probably the most frequent mode of transmission. On account of the poor resistance to drying of the pneumo and streptococci, infection through dust is improbable. As means of preventing secondary infection in tuberculous patients the following measures are recommended: Isolation of advanced cases; abundance of fresh air, avoidance of contact with people with colds, pneumonia, influenza and such acute catarrhal infections; special treatment for septic conditions of the mouth, nose and throat particularly pyorrhoea alveolaris.

Urotropin internally may be of value since it was demonstrated in one case the influenza bacilli disappeared from the sputum of a patient taking this drug. These bacilli, however, reappeared when the drug was stopped. It has been shown, however, that formalin is excreted into the mucus membrane of the bronchi—having been demonstrated by Zak in the mucus of the deeper bronchi post mortem.

Sera and vaccines seem to be the

most hopeful means of combating secondary infection. Serum treatment has the most in its favor on theoretical grounds. The difficulty is to prepare a serum against the organism which has similar characters to the one causing the infection. This difficulty is very great on account of the varying characteristics of the infecting organisms.

Radeliffe speaks in conclusion very hopefully of the use of antogenous vaccines in secondary infection. While in his series of cases only a few were benefitted, in these the results were striking. In the great majority of cases death results because of the already great extent of tuberculous development. In cases of secondary infection vaccine treatment should be instituted before the tuberculous process is too widely spread. The injection of vaccine in pulmonary patients without proving secondary infection is regarded as very unscientific.

This work was done at the King Edward VII Sanatorium, Midhurst, and is entitled the Weber-Parkes Prize Essay, 1912, and was published by permission of the Royal College of Physicians, London.

Lawrason Brown reports results in regard to secondary infection in pulmonary tuberculosis which differ from Radeliffe's work quite a good deal. (Transactions of ninth annual meeting National Assn. Tub.) Organisms were found in the circulatory blood quite frequently, i. e., 9% of 33 incipient cases, 24% of 101 moderately advanced cases, and 61% of 23 far advanced cases. Positive blood cultures were much more frequent in febrile than afebrile cases—organisms being found in the blood in 32 febrile cases as against 3 afebrile. The pneumococcus was the most frequent finding in blood culture, next the streptococci. The positive blood findings could not be casually connected with the fever, nor could the authors convince themselves that such

secondary infections play constantly an important part in pulmonary tuberculosis.

Brown and his associates also studied the organisms found in the nasal secretions in the acute coryzas in 60 cases. This work extended over two years, the organisms occurring most frequently were: *Staphylococcus pyogenes aureus*, *pyogenes albus*, *pyogenes citreus*, *streptococcus pyogenes*, *pneumococcus*, *bacillus mucosus capsulatus*, *micrococcus catarrhalis* group and the *streptococcus mucosus*. Vaccines were prepared of a polyvalent nature containing several strains of each organism. Two methods of dosage were used, one in which a single dose of eighty million organisms were given and a second where starting with 100 million, the dose was doubled every 3 or 4 days until there was a general reaction or until a final dose of from one billion to 1½ billion organisms was reached.

The optimum maximum dose seemed to lie between 400 to 800 million organisms.

Of the first series of cases there were 32 cases treated and 34 controls. From this series the patients were on the whole rendered more susceptible to rhinitis, but less susceptible to bronchitis, while the duration of the colds was unaffected.

Of the second series of cases comprising 92 cases, of which 44 or 48% were treated and 48 or 52% were controls. Colds occurred about equally among treated and controls, that the susceptibility to colds was increased during the first month after vaccination—that the duration was much reduced and that immunity from this infection seemed to extend over the remainder of the residents in the sanatorium. The authors suggest that by more careful dosage better results could be secured. Mixed infection was next considered. The sputum was studied both by plating after thorough washing and also by

animal inoculation—116 examinations were made in 73 cases. Animal inoculation was practiced 64 times in 47 cases, with 20 negative results. The most frequent findings were the streptococci 80, micrococcus catarrhalis 43, pneumococcus 38, staph pyogenes aureas 26, bacillus of Friedländer 17, micrococcus tetragenes 11 times. Influenza and other organisms were rather infrequently found.

In 51 cases vaccines were prepared; in 18 improvement resulted; 24 were apparently improved; in 9 the change was doubtful. Two were possibly harmed by the vaccination. Many of the patients treated were in very far advanced condition and doing badly. A few were remarkably benefited. No mention is made of the use of the opsonic index, and apparently only clinical indices were used as a guide in administering vaccine.

The results of these two sets of experiments show that secondary infection does play a factor in pulmonary tuberculosis, but that there still remains

a great deal of work to be done to determine just how great a factor, and in what cases. At present it is still not clear what relation these findings have to the presence of fever. Certainly the most important and predominating influence is the work of the tubercle bacillus per se. While Brown's work in vaccination against colds and secondary infections is more encouraging than that of Radcliffe, still no firm convincing note is to be found in either set of experiments. The good results of vaccination against typhoid, however, holds forth the hope that by improvement in technique and dosage a method of prophylactic vaccination against the secondary infecting organisms may still be brought out. The common practice of injecting heterogenous mixtures of organisms in febrile cases of pulmonary tuberculosis without proving secondary infection certainly should be abandoned or modified. It is likewise interesting to await the results of experiments in the use of urotrophine internally on the secondary organisms in the bronchi and air passages.

BOOK REVIEWS

ANNUAL REPORT OF THE BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION, showing the operations, expenditures, and condition of the institution for the year ending June 30, 1912. Washington: Government Printing Office, 1913.

This is strikingly more up-to-date than the Mortality Statistics, issued from the same press.

Among the many important articles, we note the following that may be of especial interest to you:

The latest achievements and problems of the chemical industry, by Carl Duisberg.

The survival of organs and the "culture" of living tissues, by R. Legendre.

Adaptation and inheritance in the light of modern experimental investigation, by Paul Kammerer.

Life: its nature, origin, and maintenance, by E. A. Schafer.

The origin of life: a chemist's fantasy, by H. E. Armstrong.

The evolution of man, by G. Elliot Smith.

Origin and evolution of the blond Europeans, by Adolphe Bloch.

BULLETIN OF THE STATE BOARD OF HEALTH OF KENTUCKY. Biennial report, 1910 and 1911.

This is one of the best state board health reports that has come under our observation, and reflects much credit upon the secretary of the Kentucky State Board of Health, Dr. J. N. McCormack. The following, from the secretary's pen, is worthy of note:

"A generation ago lawyers were employed almost entirely in preparing for and in conducting litigation in the courts. Now, corporations and wise business men employ lawyers mainly to keep them out of the courts, and the number and character of the profession thus engaged is much higher year by year. In the same way it is only a question of time until a large part of the medical profession is to be employed as medical advisors for families to tell them how to live so as to keep well instead of the much more doubtful and difficult work, as family physicians, of trying to cure them after they are sick. All sickness cannot be prevented with present knowledge, but what are very properly known as the domestic pestilences, including those especially dangerous to children and young people, can and ought to be prevented, and this should and will be constantly extended by such experimental research work and collective investigation as every State and the National Government will undertake, when a real wise statesmanship is substituted for the time-serving and political methods which were probably unavoidable in a new country like ours. It will require years of consecrated, unselfish labor upon the part of the medical profession and of such laymen as may be induced to enlist in it, often in the face of misrepresentation and derision from those to be most directly benefited, before the success of the movement is assured. How many doctors are to be compensated and supported, and whether as many will be needed under the new order of things, we have not stopped to enquire. They have the knowledge which not only qualifies them for, but which imposes the duty of, leadership."

MERCK'S ANNUAL REPORT OF RECENT ADVANCES IN PHARMACEUTICAL CHEMISTRY AND THERAPEUTICS, VOLUME XXVI.

This latest issue is even larger than last year's. The first article is a most

instructive discussion on Lecithin, in which is brought out a good many not generally known uses for this valuable remedy. The volume is also supplemented by a timely article by Professor Dr. R. Heinz of the Pharmacological Institute of the University of Erlangen, on the "Standardization of Digitalis Preparations." The work preserves in augmented form its high scientific character. The edition is limited, and is distributed principally among teachers of materia medica and therapeutics, and medical and pharmaceutical libraries. Generally, however, a few copies of each issue are left over after this special distribution, and physicians and pharmacists who make early application can obtain a copy by remitting the forwarding charges of fifteen cents, in stamps—no charge being made for the volume itself.

PYORRHOEA ALVEOLARIS. By Friedrich Hecker, B.Sc., D.D.S., A.M., M.D., Member of the Academy of Science of St. Louis, Mo.; Consultant at Bell Memorial Hospital of the School of Medicine, University of Kansas, Rose-dale, Kansas; Consultant at St. Margaret's Hospital, Kansas City, Kansas. Illustrated. St. Louis: C. V. Mosby Company, 1913. \$2.00.

This volume claims to offer the first presentation of the artificial production of pyorrhoea in a guinea-pig. The chapters on the varieties of pyorrhoea and on the pathology of the disease are worthy of special attention. The author emphasizes the value of the autogenous vaccine treatment.

We are glad to note the attempt to offer an etiological classification, the author recognizing the following varieties:

1. Diabetic.
2. Interstitial nephritic.
3. Infective.
4. Gastrointestinal toxemic,
5. Pre-senile,
6. Senile,
7. Resulting from trauma,
8. Resulting from chemical irritants.

9. Resulting from mechanical irritants,
10. Resulting from thermal irritants, and
11. Resulting from bacteriological irritants.

The author recommends removal of all collections of pus, and the use of the autogenous vaccines. Do not treat any tooth which has not a pocket. The treatment of teeth which have no pockets is mercenary and not professional; however, do not interpret this statement to mean that tartar is not to be removed if present at the neck of a tooth. It should be removed and the point at which it has collected made as smooth as possible. Each tooth affected by pyorrhoea should receive treatment as outlined or given similar treatment with such systematic treatment as indicated by the physician, assisted with the autogenous vaccines, which in practice have proven to be a most valuable adjunct in the treatment of this disease.

CUNNINGHAM'S ANATOMY. Edited by Arthur Robinson, M.D., F.R.C.S. Ed., Professor of Anatomy, University of Edinburgh. Fourth edition, enlarged and rewritten. Illustrated by 1124 figures from original drawings, 637 of which are printed in colors, and two plates. New York: William Wood & Company, 1913. Cloth, \$6.50 net; half morocco, \$7.50 net.

In this standard work on anatomy,

the Basel nomenclature is used throughout, Cunningham being the first anatomy to adopt the B.N.A. recommendations. The editor, Prof. Robinson, is Mr. Cunningham's successor to the Chair of Anatomy in Edinburgh University. Incidentally, the best anatomical teaching today is done in the University of Edinburgh, which institution has for a number of years selected its teachers upon the basis of their ability to teach, rather than upon the basis of their repute as practitioners or for other ulterior considerations. Those who are worshipers at the shrine of Vienna are surprised to find here the best anatomical museum. Students enter the dissecting room without a text-book. The normal structures and many of the ordinary variations are among the preparations, labeled so that their descriptions may be readily referred to. Should any unusual structure not be found among these, it is reported to the demonstrator as an unusual anomaly.

The writers of the various chapters hail from England, Ireland, Scotland and Melbourne. All are professors of anatomy except Harold J. Stiles, M.B., F.R.C.S. Ed., surgeon to the Royal Hospital for Sick Children, Edinburgh, who is held responsible for the excellent chapter on Surface and Surgical Anatomy.

COMMUNICATIONS

Detroit, Mich.,
November 25, 1913.

Geo. E. Malsbary, M.D.,
Editor of the Southern California
Practitioner,
500 Auditorium Bldg.,
Los Angeles, Cal.

Dear Sir:—

Will you do us the kindness to read pages 858 and 859, Journal of the A. M. A., September 13? Notice the slurring statement that our Fluid Ex-

tract Digitalis, U. S. P., is only 57.66+ % potent.

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explicit language of the "Note" at the foot of each label. Could anything be plainer or more definite?

In Doctor Puekner's tests he includes—doubtless for good and sufficient reasons of his own—our F. E. Digitalis, U. S. P., which we market only in deference to an existing demand; but the superior product which we standardize physiologically, and which we expressly recommend as more reliable and active than the official, he omits wholly from his comparison.

We contend that the official menstruum is not the one best fitted properly to extract the drug; that the fluid extract made by use of the official menstruum deteriorates rapidly; that this menstruum is inferior to the one we use for our F. E. Digitalis, P. D. & Co., No. 597; and that the U. S. P. extract does not come up to our own standard as represented by the last-mentioned product. We do claim, however, that our F. E. Digitalis, U. S. P., is made from the best quality of drug in strict harmony with the official process. We do not standardize it; we have never pretended to.

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Very respectfully yours,

PARKE, DAVIS & CO.,
Frank G. Ryan, President.

Jan. 5, 1914.

Dr. George E. Malsbary,
Editor Southern California Practitioner,
501 Auditorium Bldg.,
Los Angeles, Cal.

My Dear Doctor:—

I noticed in the December number of the Southern California Practitioner an

editorial on page 393, regarding the resignation of Doctor Snow as secretary of the State Board of Health.

To my mind the editorial places Dr. Snow in a false light, notwithstanding the fact that you have quoted directly from the President of the Board of Control. A man of Dr. Snow's known ability and integrity, it appears to me, deserves better treatment at the hands of the medical profession than the editorial, as it stands, accords.

It implies that Dr. Snow had misappropriated the funds of the State by incurring expense in visiting his brother-in-law in New Canaan, Conn. I have the word of Dr. Snow that the Board of Control were fully conversant of the circumstances relating to this expenditure. The circumstances were these: Dr. Snow, traveling by the authority and under the direction of the State Board of Health, reached New York City en route to Washington to confer with Surgeon-General Blue, the result of which was an appropriation of an added forty thousand dollars to the fund to be expended against plague-infected animals. He reached New York City on Saturday, too late to reach Washington during business hours. Monday being a holiday, he knew it would be impossible to see Surgeon-General Blue until Tuesday. Dr. Snow stopped with his brother-in-law, who is in business in New York City, but whose residence is in New Canaan, a short distance from New York City. This item of expense was his car fare out to New Canaan and back, amounting to \$1.80, I think. He saved to the State of California the expense of remaining from Saturday until Tuesday in New York or Washington.

From my personal knowledge of Dr. Snow, and his methods, it is absolutely impossible for me to conceive of his overcharging the State; as a matter of fact, I have a personal knowledge of several times when he could have legitimately made charge to the State that

he did not, and this occasion was not an exception. It is taking advantage of a technicality, the conditions of which were well understood by the Board of Control, and I feel it is unjust to give

publicity through one of the medical journals of the State to the medical profession without explanation.

Yours truly,

CHAS. C. BROWNING, M.D.

CALIFORNIA EXAMINATION QUESTIONS, SAN FRANCISCO, JAN. 14-17, 1914.

CHEMISTRY AND TOXICOLOGY.

(For Physicians and Surgeons.)

1—(a) Classify foods into main groups as to their chemical character. (b) What is the most important group as a tissue builder?

2—(a) What are the principal constituents of human bile? (b) Give the color, reaction, and specific gravity of bile.

3—(a) Give the specific gravity of blood. (b) Specific gravity of blood plasma. (c) Give the reaction of blood. (d) Give the main chemical difference in composition of plasma and lymph.

4—What are the relative differences in composition of human and cow's milk?

5—Name five important abnormal constituents of urine and give one recognized test for each.

6—(a) What is the significance of diacetic acid in urine? (b) What disease does it commonly accompany? (c) Is it in itself of any import?

7—Define toxicology; a poison; an antidote; an antagonist; ptomain; toxin.

8—Give the more important symptoms of lysol poisoning.

9—(a) What is the fatal dose of fluid extract of Gelsemium? (b) How is death caused? (c) Give the most prominent symptoms of a toxic dose. (d) What is the best treatment?

10—(a) What is the fatal dose of bichloride of mercury? (b) What are the symptoms of poisoning by it? (c) Give emergency and after treatment of the same.

11—What are the antidotes for the following: (a) Carbolic acid. (b) Oxalic acid. (c) Arsenic. (d) Cannabis indica. (e) Copper compounds. (f) Lead compounds. (g) Antimony.

12—State composition, mode of manufacture, and properties of hydrogen dioxide.

CHEMISTRY AND TOXICOLOGY.

(For Drugless Practitioners.)

1—(a) What is the normal amount of urine excreted in 24 hours? (b) Give its normal limits. (c) Give three causes for diminished quantity.

2—Name five important constituents of normal urine.

3—Name the chemical test which you consider the most practical for general work for sugar; pus; blood; urea; uric acid; bile pigments in urine.

4—Name a secretion of the body which contains each of the following: ptyalin; free hydrochloric acid; steapsin; cholesterol; erepsin.

5—What are the main inorganic elements in the composition of the body?

6—What is the percentage of carbon dioxide in atmospheric air? In exhaled air?

7—Define toxicology; a poison; an antidote; an antagonist; ptomain; toxin.

8—Give the more prominent symptoms of lysol poisoning.

9—(a) What is the fatal dose of bichloride fluid extract of Gelsemium? (b) How is death caused? (c) Give the most prominent symptoms of a toxic dose. (d) What is the best treatment?

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12—State composition, mode of manufacture, and properties of hydrogen dioxide.

GENERAL MEDICINE.

1—Mention five different conditions in which ataxia or pseudo-ataxia may be observed.

2—What is the significance of caput madusae?

3—Blood in sputum; what different areas may it come from and what may it signify?

4—Describe mitral incompetency, giving mechanism of compensation.

5—What may be the significance of enlargement of lymphatic glands? Name five different conditions in which enlargement of lymphatic glands is characteristic.

6—What may be the causes of jaundice in an adult?

7—Mention the causes of vomiting, which takes place without regard to the presence or absence of food in the stomach.

8—What is the significance of polymorpho-nuclear leucocytosis?

9—Give the symptoms of general paresis.

10—Explain the phenomenon of cutaneous tenderness in cases of visceral disease.

11—Give the symptoms and treatment of rachitis.

12—Give cardiac and cerebral symptoms of arteriosclerosis. Outline a plan of general treatment for this condition.

GENERAL DIAGNOSIS.

(For Drugless Practitioners.)

1—Differentiate between rheumatic fever and acute osteo-myelitis during the first week of the attacks.

2—Describe the appearance at birth and the early manifestations of congenital syphilis.

3—Describe the characteristic symptoms of tubercular meningitis in its va-

rious progressive stages in a child.

4—Differentiate acute anterior poliomyelitis and rickets during the first ten days.

5—Differentiate acute follicular tonsillitis and diphtheria.

6—Differentiate appendicitis, cholelithiasis and renal colic.

7—Note the cardinal points of difference between gastric ulcer and carcinoma, located in the pyloric end of the stomach.

8—Give symptoms of chronic parenchymatous nephritis.

9—Give cardinal symptoms of tabes dorsalis.

10—Give symptoms of acute catarrhal jaundice.

11—What are the signs of vertebral tuberculosis?

12—What are the causes, symptoms and sequelae of acute chorea?

SURGERY.

1—Give indications for Posterior Gastro-Enterostomy and technique of operation.

2—Give differential diagnosis of Hydrocele, Varicocele, Orchitis, and hernia of the scrotum.

3—Give diagnostic signs and method of reduction by manipulation of obturator dislocation of the hip.

4—What is Colles Fracture? Give pathology and treatment.

5—Discuss Nasal Hemorrhage.

6—Define: Fowlers position, Trendelenberg position, when and why should they be used?

7—Define: Hernia, Litholapaxy, Hydro-nephrosis, Gastrostomy, Cholecystenterostomy.

8—Discuss rectal fistula.

9—Discuss Pagets disease of the breast.

10—Give technique in detail for Ton-silectomy.

11—Define Chalazion and describe the treatment.

12—In what conditions should Buck's extension be used. Describe in detail method of application.

HYGIENE AND SANITATION.

1—What diseases are borne by mosquitoes? Discuss the parasitology, incubation, and prevention of any one of them.

2—Describe a Sewage farm. Discuss its efficiency.

3—Name three preservatives commonly added to milk. Give tests for identification of two of them.

4—You are called to attend a child, one of a family of four small children, who is suffering from diphtheria. The father of the family is a day laborer. What rules would you lay down for the protection of the family and of the community at large?

5—Discuss the epidemiology of trichiniasis.

6—What is meant by the term "Ground Water?" Discuss its source, level, flow, advantages and disadvantages as a public water supply.

7—What is "Certified milk?"

8—Describe in detail an efficient after-treatment for a room occupied by a scarlet fever patient so as to render it habitable by non-immunes.

9—Is there any difference in the significance of the finding of considerable amounts of nitrates and the finding of

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similar amounts of nitrites in a water supply? Discuss.

10—In what trades do we see instances of lead poisoning? How may this poisoning be prevented?

11—Discuss the epidemiology of "The Plague."

12—Discuss the rationale of typhoid vaccination and explain the effects produced according to Ehrlich's theory of immunity.

Answer any ten questions. No. 4 and No. 8 must be answered by all candidates. Please do not answer more than ten questions.

OBSTETRICS.

1—What changes take place in the spleen, thyroid and hypophysis cerebri during pregnancy?

2—Describe briefly the mechanism of labor.

3—Describe the subjective and objective signs of pregnancy in the first trimester.

4—(a) Give probable cause of eclampsia. (b) Describe eclampsia briefly. (c) Give treatment and reasons thereof of eclampsia.

5—(a) Describe briefly the position of left mento anterior and state method of procedure in delivering when this position presents. (b) Same for transverse presentation.

6—Define and briefly describe: (a) Pygopagus. (b) Acardiacus acephalus. (c) Hydrocephalus. (d) Exencephalus. (e) Cyclops.

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GYNECOLOGY.

1—Diagnose differentially between carcinoma of the cervix uteri and papillary tuberculosis of the cervix uteri.

2—Describe one operation of round ligament ventro suspension of the uterus.

3—Diagnosis differentially between ectopic gestation and fibroid of the uterus.

4—Describe the medical treatment of salpingitis for both the acute and chronic conditions.

5—What are the indications for the operation of trachelorrhaphy and describe one operation of trachelorrhaphy.

6—Name ten conditions that may be confounded with ovarian cyst and diagnose differentially between ovarian cyst and one of the named conditions.

MATERIA MEDICA.

1—Give dosage, chief physiological action, and from what the following are derived: (a) apomorphine, (b) atropina, (c) cocaina, (d) hyoscina, (e) pilocarpina, (f) strychnia.

2—What are the three most common modes of administering medicine? How and why should dosage vary?

3—Name four different ways by which antipyretics reduce temperature, and give an example of each.

4—What is ipecacuanha? From what is it derived and what is its physiological action, and therapeutic uses?

5—Correct the following Rx, which was prescribed for a subacute bronchitis with a dry irritating cough:

Rx

Heroin gr. XVI

Tr. Ipecac drams II

Ammonii Bromide drams I

Iodide Potassa drams VI

Syrup of Sarsaparilla Comp. oz IV

M Sig. A teaspoonful in water every two hours.

6—How would you make Infusum Senae Composition 1 pint? Give the dose in the metric system.

7—What is the physiological action of the following drugs upon the circulation? (a) Digitalis. (b) Strophanthus. (c) Sparteine. (d) Adrenalin. (e) Nitroglycerine. (f) Caffeina.

8—Approximately, how much morphine in 10 grains of Dover's powders?

9—Give treatment for the following: (a) Tapeworm (taenia solium), (Taenia Media Canellata). (b) Round worm

(ascaris Lumbricoides). (c) Thread worm (Oxyuris Vermicularis).

10—Treatment for Anasarca due to heart lesion. Ascites due to liver lesion. Uraemia.

11—What do you understand by cumulative action of drugs? Name two commonly used that have such action?

12—In what diseases are the preparations of arsenic chiefly used, and what untoward symptoms may arise from their use?

ANATOMY AND HISTOLOGY.

1—(a) Name and make a drawing of all varieties of epithelial cells and tell where each are found. (b)—Describe by diagram the histological structure of the skin.

2—(a) How are bones classified? Give a typical example of each class and tell what beneficial attributes each possesses. (b) Describe by diagram the histological structure of bone, showing normal development and regeneration. (c) Diagram of a longitudinal section of the femur, showing outline and microscopical internal structure.

3—(a) Give formation and tributaries of the portal vein; give most inferior tributary. (b) Give formation and surface location of the superficial and deep palmar arches. (c) If the external iliac artery be completely blocked at its middle how may the circulation of the lower limb be re-established.

4—(a) How many vertebrae? Name groups and number in each group. Give essential differentiating characteristics of each group. Make a diagram of a typical cervical vertebrae.

5—To which bones do the following belong? (1) Coracoid Process. (2) Ext. Occipital Protuberance. (3) Mastoid Process. (4) Ext. Malleolus. (5) Obturator Foramen. (6) Coronoid Process. (7) Linea Aspera. (8) Olecranon Process. (9) Bicipital Groove. (10) Styloid Process.

6—(a) If the thigh be amputated at the junction of the middle and lower third what structures would be divided? (b) In a complete fracture of the femur at its middle, displacement of the fragments usually occurs. Discuss causes and direction of displacement.

7—(a) Diagram cross section of spinal cord at the level of the third thoracic vertebrae. (b) Describe formation of the

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third thoracic spinal nerve and its distribution. (Use diagram if desired.)

8—Describe the stomach bed and give relations of the stomach.

9—Discuss the shoulder joint, how and where reinforced by structures other than its proper ligaments. What is its weakest point and why?

10—(a) Name the muscles of mastication and give nerve supply. (b) Give nerve supply of the muscles of expression. (c) Give nerve supply to the hand.

11—(a) Discuss the hypophysis cerebri, its structure, location and function. (b) Brief discussion of the thymus gland.

12—Discuss the descent of the testis.

Answer ten questions only. (Questions are numbered from one to twelve.)

PATHOLOGY AND BACTERIOLOGY.

1—(a) What organs should show the most pronounced changes in an infant dying at birth of syphilis? (b) Describe the pathologic changes usually observed.

2—In what respects do chancre and chancroid differ from one another pathologically?

3—(a) Discuss anaphylaxis. (b) Define Leucocytosis and state the varieties.

4—(a) Mention five signs of death. (b) Describe two.

5—(a) Define "Giant Cells" and describe varieties. (b) Define cell infiltration. (c) Differentiate histologically basal cell epithelioma and squamous cell epithelioma.

6—Name and describe three "pre-cancerous" states and discuss the conditions under which they may develop.

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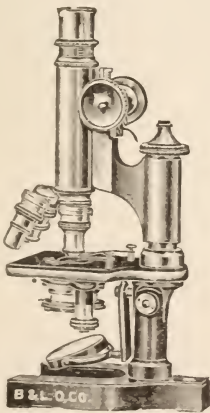
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(For Drugless Practitioners.)

7—(a) Mention five common pyogenic micro organism and describe their morphological appearances and state the diseases in which each may be seen. (b) Define, describe and give examples of bacterial capsule, bacterial polar bodies, bacterial flagellae and bacterial spores.

8—(a) Mention three physical agents injurious to bacteria and state the condition under which each one acts most injuriously on bacteria. (b) Mention five chemical agents injurious to bacteria and state the conditions under which each of the foregoing acts most effectively as a bactericide.

9—(a) What are blastomycetes? (b) Give one example of a pathogenic va-



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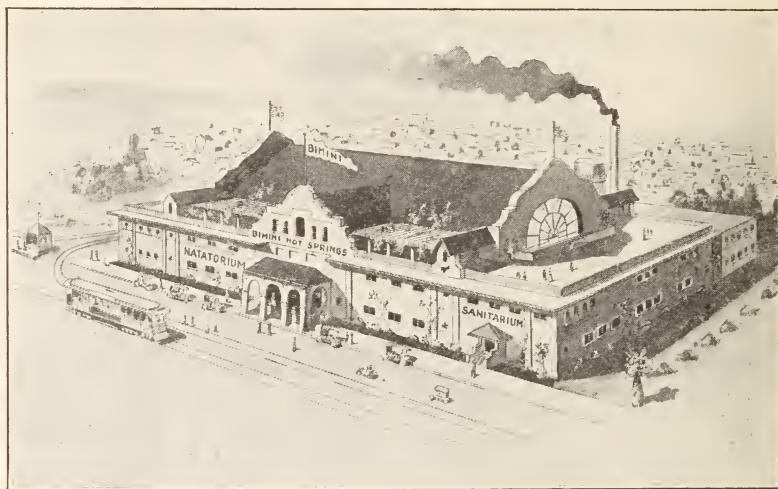
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riety and describe briefly the disease caused by the same. (c) Mention four bacterial diseases to which the cities of the Pacific Coast are exposed by reason of the increasing Central American and Oriental commerce, and name the causative micro-organisms.

10—(a) Describe in detail the process of making a cover slip smear and stain of material for bacteriological examination. (b) Mention two common stains for use in the identification of bacteria and describe in detail their use. (c) Describe the morphological and tinctorial characteristics of the causative organism of gonorrhea and differentiate it from other organisms similar in appearance.

11—(a) What thermal and environmental conditions are most favorable for the growth of bacteria? (b) What thermal and environmental conditions are least favorable for the growth of bacteria. (c) What are culture media? Give three examples. (d) Describe in detail the most effective means employed commonly for the sterilizing of culture media before use.

12—(a) Describe the modes by which the main classes of bacteria reproduce themselves. (b) Name four chemical agents found in bacteria. (c) Define Acrobies. Give an example. (d) Define anacrobies. Give an example. (e) Define facultative acrobies.

(For Physicians and Surgeons.)

7—(a) Define phagocytosis. (b) Define opsonins. (c) Define bacterial symbiosis and bacterial antagonism. (d) How would one examine fresh material for the organism of blastomycosis.

8—(a) What is a bacterial vaccine and how is it prepared and how usually administered? (b) What effect does it usually produce when given in normal dosage? (c) What are the effects of an overdose? (d) Describe the common varieties of the staphylococcus, and lesions produced by the same in man.

9—(a) Describe the technique of examining sputum for tubercle bacilli. (b) Differentiate the tubercle bacillus from the lepra-bacillus and the smegma bacillus. (c) In what tissue is the lepra bacillus most commonly found? (d) Describe the methods of examining specimens for the lepra bacillus.

10—Name and describe the causative organism of lues and differentiate it from two common varieties of the same type of organism.

11—(a) Describe the biological characteristics of the diphtheria bacillus. (b)

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To what factors are the harmful results of infection by the diphtheria bacillus due and what tissues are mostly involved in the process?

12—(a) Describe one variety of a fungus that grows commonly on the skin. (b) Describe the lesions it produces. (c) How is it grown artificially? (d) Describe a simple method of examining material for this fungus.

Note: In Pathology and Bacteriology, the first six questions were propounded to both Physicians and Surgeons and Drugless Practitioners.

PHYSIOLOGY.

1—Discuss the interchange of gases between the blood in the pulmonary capillaries and the air in the alveoli.

2—What is the effect of stimulation of the facial nerve at its root?

3—Discuss the regulation of heat production and heat loss in the human body.

4—Describe the course of an auditory sensation.

5—Discuss cutaneous sensation.

6—What is the physiological significance of muscle tonus?

7—What is the effect of complete division of the spinal cord?

8—Name five enzymes giving origin and function of each.

9—What physiological processes does the heart muscle exhibit which differ from those of skeletal muscle?

10—What are the functions of carbohydrates? How are they absorbed from the intestines?

11—Discuss the inhibition of reflexes.

12—How is the blood regenerated after clotting?

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acid urine contains the infecting organism, usually a colon bacillus, pus, and often blood. Rest in bed, local warmth, light diet, free catharsis and sanmetto are the measures employed, and in a few days the severity of the attack subsides, and generally in two or three weeks the patients are as well as ever.

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RADIUM IN SURGERY.

BY HOWARD A. KELLY, M.D., BALTIMORE, MD.

It is a curious fact that the revolutionary importance of radium, the creator of a new science, destined to transform physics as well as chemistry, should for a time be almost overshadowed by another enormously important practical discovery, namely, that of its utility in alleviating or in curing various refractory diseases. The discovery of the therapeutic possibilities of radium lies at the door of the French and was apparently the result of an accident to M. Becquerel, who carried a few milligrams of the element in his vest pocket for some hours and later noted a superficial burn of the skin. Verbum sapienti sat! A tentative use was at once made by Dr. Danlos, a skin specialist, and through this small door accidentally opened, admission was secured to an arena which we are today only beginning to explore. Other French pioneers, notably Wickman, Dégris,

Dominici, Chéron and Bareat took up the new agent with characteristic national enthusiasm and developed its therapeutic resources almost to their present limits. These path-finders were soon followed by a notable German school, which on account of the difficulties of obtaining radium in any considerable quantities began to experiment with Hahn's mesothorium and found it equally active and fortunately, for a time at least, about one-third the price. Today a number of German Clinics have at their disposal some hundreds of milligrams of mesothorium. Prominent among these Clinicians are the names of Döderlein, Krönig, Bumm, Lazarus, Gudzent, Sanbermann, etc. One must also not forget to mention the work of Dr. Pinch at the London Radium Institute which has a large amount of radium in constant use. In America our pioneer investigator is Dr. Robert P. Abbé of New York.

The use of radium in medicine, although it has gone far in a single decade, is still *terra nova et incognita* on whose borders we stand as we stood in relation to the use of our X-ray apparatus some fifteen years ago. The largest fields of utility for our new radium-therapy lie in the domain of cancers of all kinds (including the sarcomata), and vascular tumors and other abnormal growths on the surface of the body, including some of the internal cancers such as those of the mouth and of the larynx and of the womb and the rectum. Its value in general medical troubles, such as gout and rheumatism and a variety of blood diseases, is being explored diligently but it is not yet time to forecast the results.

My own experience with radium, in association with Drs. Curtis F. Burnam and Robert M. Lewis, is based on several hundred cases, including cancers in all parts of the body, of the face, the mouth, the throat, the larynx, the neck, the chest, and the lower part of the abdomen. We find that skin cancers, particularly those seen in the earlier stages, when they have not deeply invaded the tissues and have not yet produced metastases in remoter parts of the body, are remarkably uniform in their behavior, recovering rapidly often under a single thorough application. In these personal experiences, we are in full accord with those of our French confrères.

Cancers of the mouth and mucous membranes generally are not so readily amenable to treatment, but we have seen some of these, especially when affecting the lips, heal up under a single large application, using several hundred milligrams at a time, for several hours. In cancer of the neck of the womb, where the disease is apt to spread so rapidly and where our surgery is so often baffled, radium is of value in several ways. In three pa-

tients where the disease had manifestly gone beyond the stage, the uterus was taken out and radium was used. In each of these three there has been no recurrence, and health and comfort have been fully restored, although one is over two years, another about two years old, and the third was done last spring.

I have also treated a number of patients who have been operated upon in other cities and whose surgeons have sent them to see if radium would eliminate a recurrence of the growth at the seat of the operation; these one and all could not have been operated upon again with the slightest hope of permanent relief. In each case where the ulceration and the fungating process were confined apparently to the vaginal vault and not extending laterally there has been a complete recovery; several have recovered where there was an extension.

I have also had a small group of cases where no operation for the cancerous uterus could be done on account of the general condition of the patient who had some other serious ailment, such as Bright's disease or diabetes. Several of these, too, have apparently been cured. Even where we could not wipe out all of the disease, there has been a marked improvement in relief from pain, in the cessation of bleeding and other distressing discharges and an improvement in the general condition of the patient, as well as relief from despondency and gain in appetite and weight.

I have seen several cases of cancer of the rectum, one treated over a year and a half now, apparently cured without any operation. In one case, a man about eighty-two years old, the cancer of the rectum was cured but he had metastases in his liver which continued to grow until he succumbed. In breast cases it has often been possible to get rid of the nodular skin recur-

rences in a remarkable manner and we have two cases which appear to have been completely cured—one of two years' standing and one of three months'. In the first there were large lumpy recurrences in the skin and on the chest wall. In a remarkable big lympho-sarcoma under the jaw, the size of a small fist and utterly inoperable, the disease began to disappear at once under the radium, in three days a great difference was evident, and in ten days it was gone. Radium treatment here appears to act almost as a specific.

Again, cancer of the larynx is favorably affected and in some cases cured. In an extraordinary lympho-sarcoma pushing well up into the left side of the neck, the mass at the neck disappeared entirely and the chest was almost restored to its normal appearance, as shown by X-ray photographs taken.

I am careful always to say that they "apparently" recovered, as sufficient time has not elapsed to enable one to speak with absolute certainty and all such patients ought to be kept under observation for several years. I believe, however, that with few exceptions, these recoveries will be permanent, judging from my own experience and that of many others.

Radium, however, does not to any large extent replace surgery, but comes as a valuable adjutant to extend its field by making a group of inoperable growths operable, or by making it possible to take out a large part of the mass and to treat the residuum with radium. The happiest use of radium is in the new growths about the face where it often heals without loss of tissue or deformity, "saving the face" of the patient literally.

Radium is likewise valuable and quite certain to cure without operation those hemorrhagic uteri which are dependent upon vascular and muscular changes and not associated with cancer.

The application is made over 24 hours. Two or three treatments at intervals from one to several months either check or entirely do away with the menstrual flow. The operation of radium in this case seems to be not in the uterus but in the ovaries themselves. Radium here comes into competition with the hard Beta X-rays.

It is of use in inflammatory troubles, acting upon the tissues and not upon the organisms. This field is being worked out. It is an invaluable agent in pruritus of the vulva and of the anus. It checks the growth of fibroid tumors as well as the hemorrhage, but its greatest value is in the smaller tumors which have not risen out of the pelvis. It is used at the vaginal vault or by dilating the cervix and introducing say 100 mgr. into the wound.

In general, radium is applicable under the following conditions:

- (1) To cure cancer outright without surgical intervention. This has been done in many instances where the disease has been pronounced hopeless.

- (2) To irradiate the tissues before an operation in order to render recurrence less liable.

- (3) The radium is placed in the field of the operation at its conclusion either to destroy any manifestly diseased areas which the surgeon has been forced by the necessities of the case to leave behind, or again when it is because of the general fact that there is a definite percentage of recurrences even in the favorable cases. Without any doubt radium will greatly reduce this number by destroying the microscopic invisible elements left behind.

- (4) Operating deliberately through cancerous tissues with extensive infiltration and then applying radium afterwards. One often sees after this a remarkable change in the tissues which become leathery or brawny and the discharges cease, with hemorrhage and

pain. The disease may, however, in such cases continue to progress slowly to the end. As yet we cannot handle massive recurrences and neglected cases, but we can handle comfortably early cases and many of those which from position or extent are inoperable.

In conclusion, let me say that the field of utility for radium is just opening up and we are living in the dawn-

ing of a new era. It will undoubtedly produce a number of specialists who will devote themselves to the difficult handling of this new and powerful agent. With experience and skill, will come more refined methods and their extension over a wider field.

HOWARD A. KELLY,

1418 Eutaw Place,

Baltimore, Md.

CEREBRAL RHEUMATISM AND CHOREA.*

BY DR. THOMAS COE LITTLE, OF SAN DIEGO.

The relation existing between rheumatism and chorea is both interesting and practical, and one in regard to which for a long period of time differences of opinion have been freely expressed. All observers have recognized some connection between the two conditions since early in the 19th century. Botrel in 1850 contended that all chorea was rheumatic in origin. In a careful examination of three cases of chlores at autopsy, Steiner in 1868 found evidence of definite structural change in the cerebro-spinal axis, while Golgi, six years later, in his studies of infectious diseases reports cortical changes in chorea. Cheadle in his Harveian lectures, 1888, conclusively demonstrated the widespread lesions of the disease. One year later Westphal, Wasserman and Wackoff reported a case of carditis and chorea in which they isolated a small diplococcus which produced polyarthritis in a series of 80 rabbits. After intravenous inoculation of a rabbit with a diplococcus resembling that described by Wasserman, Poynton and Paine observed a peculiar involuntary inco-ordinated twitching movement. These observations have been confirmed by Fritz-Meyer and Beattie. Cole has noted similar movements after the injection of other streptococci.

Acute rheumatism is a disease which quite frequently attacks the central nervous system. Of the infectious neuroses, the most common and perhaps the most remarkable is chorea, and at the present time no disease promises more prospect of furnishing a clew to the explanation of the so-called functional nervous diseases; yet the rarity of death during an attack makes the elucidation of the subject extremely difficult. Poynton states that the following facts have been ascertained:

1. Chorea is very frequently associated with acute rheumatism.

2. The association is of such a close nature that chorea when rheumatic must be looked upon as a manifestation of that disease.

3. The more carefully the examinations are conducted after death, the more frequently are cerebral lesions found.

4. Various investigations have isolated micrococci from the meninges, cerebro-spinal fluid, and brain in chorea.

As a result of these investigations we have at present this hypothesis to work on: that rheumatic chorea is probably the outcome of an infection of the brain and its membranes with the diplococcus rheumaticus; in the words of Sir Dye Duckworth, "We have a cerebral rheumatism." This position once

*Read before the San Diego County Hospital, Dec. 2, 1913.

gained, we are much aided in further inquiry by the study of other rheumatic lesions, especially those of the heart. The latter are quite frequently fatal and this makes it a comparatively easy task to study rheumatic processes here, and thereby obtain hints as to the probable nature of the lesions to be found in chorea. The Micro-coccus is carried in the blood stream to the nervous system, escapes from the capillaries, infiltrates the connective tissue surrounding them, thus damaging the nervous tissue locally by the presence of diplococci in the connective tissue, or generally by the action of the bacterial poisons upon it; in the former the symptoms are local; in the latter general. It is desirable to limit the term chorea to a definite morbid entity. The choreoform features of hysteria which characterize epidemics of St. Vitus dance, of hereditary or Huntington's chorea, of the electric chorea of Dubini, of the habit chorea or the *maladie des ties* of the French with the various forms of myoclonus, should be carefully distinguished from chorea minor, or the acute chorea of Sydenham. This is an acute disease of childhood, rarely of the adult or aged, characterized by irregular inco-ordinated involuntary movements with a variable amount of physical and mental disturbance, and is very often associated with other rheumatic affections, as arthritis and carditis. For the purpose of description we may divide the affections into the mild and the grave or morbus form.

In the mild form the onset is commonly insidious, but the motor symptoms may appear abruptly. Generally there is a prodromal period manifested by peevishness, by distressing dreams, by apprehensiveness, by inattention, by lack of interest, loss of memory, lack of concentration, and by emotional disturbances. Motor disturbances ordinarily begin in the muscles of the hands and forearms or in the face. Soon

the lower extremities, shoulders and trunk are affected in varying order. Sometimes the movements are confined to one side only, hemi-chorea, or starting in one group of muscles, subside and then involve others. The affected muscles show three important modifications of function:

1. Involuntary but conscious twitching or spasm.
2. Inability to maintain constant contraction.
3. Reduction in power.

The spasm may be described as inco-ordinated, irregular, involuntary, arrhythmic. It is of large amplitude, and of a rapidity between a tic and an athetosis. The movements cease during sleep; they can be slightly controlled by voluntary effort; they are increased by excitement or emotion. In the face the movements manifest themselves by grinning—these affect especially the tongue, lips, nose and eyelids. Speech is impaired, becomes explosive or halting, with complete anarthria in severe cases. Swallowing becomes difficult, due to the inco-ordination of the muscles of deglutition. Rarely the extrinsic ocular muscles are implicated, causing a transient diplopia. In the upper extremities the movements are most severe, and generally make their appearance first in the fingers, which separate, extend, flex and close, with much disorder. The shoulders are more involved than the elbows and shrugging is very common. When chorea is well marked, objects are grasped with difficulty, and the hands approach an object with a zig-zag motion and swoop suddenly down upon it. At times sense of position is entirely lost and the patient is even unable to feed himself. The affection of the lower extremities is not so marked, but as in the upper, the digits show the most disorder. The trunk and neck are at times involved, causing nodding and swaying, and when the

diaphragm and thoracic muscles are invaded, respiration becomes irregular and jerking, with peculiar spasmodic chugging and swallowing noises. The gait is often unsteady, the steps are unequal in length and irregular in time, the feet jerk too high, the knees are not well supported and the entire lack of rhythm gives the picture characteristic of the gait of the disease. The station at times becomes unsteady, uncertain and impossible, and this with the loss of muscular power, may reach a point which constitutes the paralytic form. The handwriting is another motor feature of interest; this varies from slight irregularities in mild cases to complete motor agraphia in the severe. The sphincters are not affected except in the late stages of fatal cases. Objective sensation is normal. There is no anesthesia, analgesia, or therm anesthesia, and a departure from this would lead to a suspicion of hysteria. General wasting of the muscles is common, but no group paralysis or atrophy is present. The reflexes are active as a rule, especially the knee jerks, with definitely flexor planters. Oppenheim recently called attention to the presence of the carpo-metacarpal reflex and demonstrated it in 70% of his cases. Personally I have been able to elicit this reflex in every well marked case in which a careful search was made. Mental disturbances are constantly associated with chorea in a greater or less degree. The prompt recovery from these synchronously with the disappearance of the muscular premonitory is a clear indication of the intimate relationship existing between psychic and somatic phenomena, which is so common in diseases of the nervous system. The influence of the muscular attitude on the mind is striking. The facial expression of laughter, sorrow and anger cause corresponding emotional states in accordance with the well known law of association and the

reciprocate influence of emotion upon the muscular and physiognomic attitudes. These, with confusion of the higher centers, not unfrequently cause mutism. Hallucinations of sight are common, but rare of the other senses. The cardiac disorders are those associated with rheumatism and will be covered elsewhere in the discussion.

General nutrition is commonly reduced in chorea. Anemia, mental and physical depression, loss of appetite, constipation and indigestion develop early and are quite commonly aggravated by the injudicious use of arsenic. The onset in the mild form is gradual and the duration variable, generally from two weeks to two months. In the severe cases the onset is more abrupt and lasts from six months to one and one-half years. The termination in both instances is usually complete recovery, although in rare instances death ensues. Occasionally the disease becomes chronic and exceptionally chorea is followed by a habit spasm or a tic. In the morbus form the condition becomes apparent some time during the third to the fourth week of the active rheumatic process—rarely after the temperature has subsided for any length of time. There is no means of knowing in what particular case this danger exists, for, like post-diphtheritic paralysis, it occurs apparently with equal frequency in the mild as well as in the grave cases.

The premonitory symptoms are headache, vomiting, nausea, insomnia, restlessness and delirium, and cutaneous hyperaesthesia. Later and in the severe cases the mental symptoms are more serious, stupor, convulsive twitchings, irregular breathing, tachycardia, hyperpyrexia (106.8 F.), staring eyes, dilated pupils, incontinence of sphincter and lividity of the skin. Gross cerebral lesions after death are the exception, but the following case, studied with Mr. Batten at the hospital for sick

children, Great Ormond street, London, shows the occasional occurrence of meningitis:

L. F., female, age 11; admitted February 6th, 1907, for arthritis of both knees and ankles and for chest pains. Family history good except mother had two attacks of rheumatic fever. Previous history good except slight attack of chorea at 7 years. Onset gradual, with illness of one week's duration. Examination on admission—temperature 103.2 F., pulse 130, pain, heat, tenderness and swelling in ankle and knee joint, dilated left heart, systolic murmur well transmitted to axilla. Under rest, diet, baths and small doses of salicylates, patient did well and symptoms all subsided within the week. February 27th, she complained of headache and nausea, temperature 103.4 F. On the following day the headache persisted, with vomiting and temperature 104.2 F. The third morning the patient was unconscious, with muscular rigidity and with dilated, fixed pupils. At noon she was comatose, with a temperature of 106.2, and died that evening. Autopsy showed endocarditis, involving especially the mitral valves, and cerebro-spinal plastic meningitis. There were no foci of suppuration. The meningitis was most marked at the base of the brain. Organisms were isolated and produced polyarthritis with twitching movements in a series of guinea pigs.

Recurrence of chorea occurs in about 33 1-3% of the cases. It is 10-12 times more frequent in the female, but as a rule each succeeding attack is milder in severity and shorter in duration. The diagnosis of cerebral rheumatism is extremely simple when the motor symptoms are well developed. Confusion arises in mistaking the choreoid movements of other diseases, chief of which are metallic and toxic poisoning, hysteria, disseminated sclerosis, athetosis, myoclonus and Friedreich's ataxia, all

of which have an organic basis with definite course and findings. Tics are sub-conscious purposeful movements well co-ordinated. Huntington's chorea and electric chorea are extremely rare and have a history and clinical course which readily differentiates them.

Treatment consists principally in dietetic and hygienic measures. Milk in increasing quantities, absolute rest, isolation and baths. Drugs play a secondary role and their indications are symptomatic. In the severe form, to obtain rest, sedatives, narcotics or even restraint may be necessary. The complication should be promptly met on this individual basis. Recurrence should always be anticipated and parents should be taught the significance of sleeplessness, irritability, a capricious appetite and conduct, and at once resume proper measures of treatment. Particular care should be exercised to maintain both general health and body weight.

To summarize: From the evidence at hand one reaches the following conclusion:

1. That acute chorea and cerebral rheumatism are one and the same affection, varying only in degree.
2. That acute chorea and cerebral rheumatism are an infection of the central nervous system by the *dephlococcus rheumaticus* and are manifested of acute rheumatic fever.
3. That acute chorea and cerebral rheumatism are very frequently associated with arthritis or carditis or both.
4. That motor features, mental disturbances and cardiac disorder predominate in both acute chorea and cerebral rheumatism.

Beginning with next autumn the Long Island College Hospital, Brooklyn, New York, will require one year of college work for admission to the freshman class.

SOME SUGGESTIONS FOR A MORE RATIONAL SOLUTION OF THE TUBERCULOSIS PROBLEM IN THE UNITED STATES.*

BY S. ADOLPHUS KNOFF, M.D., PROFESSOR OF MEDICINE, DEPARTMENT OF
PHTHISIO THERAPY, AT THE NEW YORK POST-GRADUATE
MEDICAL SCHOOL AND HOSPITAL.

In summarizing, let me repeat then that in spite of all our efforts we are still losing about 200,000 people annually from tuberculosis in the United States. Of these, I venture to say, 50,000 are tuberculous children. Estimating the average duration of life of the 50,000 children who die annually from tuberculosis in the United States at about seven and one-half years, and figuring the cost to parents and the community for each life as only \$200 per annum, the financial loss thus represented is \$75,000,000. These children have died before they have been able to give any return to their parents and the community. What a useless sacrifice of life and of money! How much needless sorrow and heartaches caused to parents!

Besides all this, many a tuberculous mother has had her life shortened because she bore one of these children. According to the report of the commissioner of education, there are at this time about 20,000,000 children attending public schools in the United States. Placing the proportion of tuberculosis among them as low as only three per cent. would make 600,000 children afflicted with tuberculosis who are at this time in urgent need of open air instruction or sanatorium treatment. According to available statistics we can at present provide instruction in open air classes for about 2000 tuberculous children. The anemic, the nervous, and the children suffering from cardiac diseases, who are in equally great need of outdoor instruction, are not included in the three per cent.

The 150,000 adults who die annually of tuberculosis have at the average been ill and incapacitated for work for at least two years, and figuring their cost to the commonwealth (either to municipality or individual family) at only \$1000 per year, would mean \$300,000,000 uselessly spent in caring for people afflicted with a disease that might have been prevented or cured. Of these 150,000 adults a large number have been married and in many instances leave either widows or orphans depending upon public support. The annual maintenance of these widows and orphans must, of course, also run into the millions. We have thus an annual expenditure of well nigh \$400,000,000. Yet this by no means represents all the actual loss to the community from tuberculosis. Our social economists tell us that between the ages of 16 to 45 every adult life with an average earning capacity represents an asset of \$5000 to the community. Now, as two-thirds of all deaths from tuberculosis in adults occur between these ages we have an additional loss of \$5,000,000 to the community. Thus, the actual direct and indirect loss caused by death from tuberculosis in the United States amounts annually to something like \$900,000,000, and this amount we spend on a preventable and curable disease!

We must also bear in mind the fact that we have at least eight times 150,000 tuberculous adults, for it is well known that for every individual who dies of tuberculosis there are eight living with the disease, spreading infection. Be-

*Summary of the paper read at the National Conference on Race Betterment held at Battle Creek, Mich., Jan. 8-12, 1914.

sides these, there are about 400,000 tuberculous children. By reason of lack of open air schools, preventoria, sanatoria, special hospitals, and horticultural, agricultural and industrial colonies, the vast majority of these 1,200,000 tuberculous individuals continue the chain of infection and keep up our fearful morbidity and mortality at an expense of \$900,000,000 per annum.

Surely, the time has come for dealing more rationally with at least some phases of the tuberculosis problem in this country. And what are we to do first? We must at once, throughout this vast country, strive to have no uncared-for tuberculous patients. To this end, institutions for treatment and care of the tuberculous who cannot be cared for at home without endangering others, should be multiplied by State and municipal appropriations and private philanthropy.

We must not be content with merely sending the tuberculous individual to a sanatorium for 6 or even 12 months until his disease is arrested or his condition improved and then allow him to return to his former deplorable unhygienic home environments or to resume his former occupation under the equally deplorable unsanitary conditions, which were probably responsible for his contracting the disease originally. Agricultural, horticultural, and industrial colonies, where the sanatorium graduate may have an opportunity to go for a year or more to earn a fair wage and at the same time be given a chance to make himself stronger and more resistant against a new outbreak or invasion of the disease are as essential as sanatoria or special hospitals. Without making the arrest or the cure of the disease lasting by such judicious after care, the millions of dollars spent for sanatorium maintenance are a sheer waste of money.

Even the smallest children if found

tuberculous should receive institutional treatment when the parents are poor, and whenever possible, the mother should be allowed to remain with the child. For larger children afflicted with pulmonary tuberculosis we should have inland sanatoria with schools attached to them. For children afflicted with glandular joint, and bone tuberculosis, we should have seaside sanatoria and some of our discarded battleships or cruisers may be utilized for this purpose instead of being sold as junk or made to serve as targets.

Open air schools and as much open air instruction as possible in kindergarten, school and college should be the rule; indoor instruction should be the exception. There should be no home lessons for the younger children. Love for life in the open air should be inculcated in the young and old throughout the country.

There should be a sufficient number of public parks and playgrounds in our great cities to counteract congestion and reduce it to a minimum. The roofs of all city houses should be utilized to give more open air life to the inhabitants by making them into roof gardens, recreation centers, or playgrounds. Outdoor sleeping should be encouraged whenever feasible.

Medical under- and post-graduate schools should give special courses in early diagnosis of tuberculosis, and instruction in how to inaugurate efficient social service for hospital cases afflicted with tuberculosis.

Early recognition of the disease should be facilitated for all classes by universal semi-annual examinations by private physicians for the well-to-do and by publicly appointed diagnosticians for the poor. The federal and municipal authorities and the employers of large bodies of men and women should set the example by enforcing these semi-annual examinations and should further

what is commonly known as welfare work.

Besides popular anti-tuberculosis and general hygienic education, demonstrations by permanent exhibits, distribution of literature, lectures in schools, colleges, workshops, mills, factories, mines, stores and offices, the examination of every tuberculous adult should be accompanied by personal instruction in how to prevent infecting others. Anti-spitting ordinances should be enforced, but receptacles in public places for those who must spit should also be provided.

There should be state insurance against tuberculosis so that the man without means may be assured that even if he is found to be tuberculous he or his family will not be in want. Until, as in Germany, state insurance companies have their own sanatoria, our private insurance companies should be permitted to establish and maintain sanatoria and special hospitals for their tuberculous employees and policy holders.

Other sources of tuberculous infection, as for example from cattle or hogs, should be dealt with by federal laws since state laws by reason of their diversity and often inadequacy have proven inefficient. All milk, if not coming from tuberculin-tested cattle, should be thoroughly and scientifically and not merely commercially sterilized.

The influx of tuberculous immigrants likely to become a burden to the community should be prevented by compelling all steamship companies to assure a clean bill of health for every immigrant they bring to these shores and to insure every immigrant against tuberculosis. The policy should entitle the bearer to return transportation and free treatment in a sanatorium in the event of his contracting tuberculosis within a specified time. The cost of the insurance could be added to the price of the steamship ticket.

Procreation of the tuberculous should be prohibited by law and the prevention of it taught to every tuberculous adult. The individual wilfully violating this law should be punished in a way to make the repetition of the offense impossible.

The predisposing factors, such as child labor, sweatshop labor, too long working hours for men and women, bad housing conditions in tenements, apartments, lodging houses and hotels in city and country, including farm houses, boarding houses, orphan asylums, and other institutions housing many people, must be combated by rational laws and their strictest enforcement. The same rigor should be applied to laws concerning proper ventilation and sanitation in workshops, factories, stores, federal, municipal and private offices, and in public conveyances.

Wherever and whenever practical, the home of the married American workman should be a detached single family house.

Maternity and convalescent homes should be provided in every city and town so that the laboring woman arising from childbirth or the laboring man or woman recovering from a surgical or a general medical disease can recuperate, regain strength, and thus not be susceptible to tuberculosis on returning to their daily vocations.

Tuberculosis among the Indians and Negroes, Chinese and Japanese must receive special attention on the part of our federal government with the view to combating the morbidity and mortality from tuberculosis in these races (particularly in the Negroes and Indians) in this country which is three times higher than that from tuberculosis in the white race. Nearly all our reformatories, prisons, and other penal institutions, including detention prisons, must be reconstructed or remodeled, cells and workroom made sanitary and more outdoor life and better feed given

to the prisoners if a few years of penal servitude is not to be equivalent to a death sentence by tuberculosis. No tuberculous prisoner should be discharged unless he is sent to a sanatorium so that when free he may also be well.

Malnutrition and the underfeeding of the masses, which is so great a predisposing factor to tuberculosis, should be combated by beginning with having fewer artificial and more breast-fed babies; by instructing ignorant mothers how to feed infants and little children; by providing simple but substantial school luncheons for all school children at cost; by education of the mothers in economic house keeping, cooking, and food values; and by having eating places for the great army of unmarried laborers after the example of the German "Volkaküchen" where people can receive good, wholesome food at reasonable prices; by legislative and philanthropic endeavors to make farming more profitable and more attractive, and by a wiser statesmanship whereby the cost of living may be reduced for the entire people.

Alcoholism and other excesses predisposing to tuberculosis should be prevented by education along rational temperance lines and wise and judicious legislation.

The eradication of tuberculosis as a disease of the masses with all the physical, mental, and moral suffering, and the millions in money now sacrificed largely in vain, is nevertheless possible, but I emphasize once more, not until every tuberculous individual, in no matter what stage of the disease, is properly cared for at home or in an institution and all the predisposing causes removed. All the measures to attain this end must of course be inspired, not by a blind phthisiophobia (an exaggerated fear of tuberculosis) nor by an hysterical phthisiophobia (allowing the tuberculous person to do as

he pleases because of our sympathy or love for him). The intelligent co-operation of the tuberculous patient is as much needed in the solution of these various problems as that of the statesman, physician, philanthropist, and the people at large.

The various measures which I have ventured to suggest and which are described in detail in my paper, must not ever be allowed to become a crusade against the tuberculous individual, who is our friend and brother, but for his sake and our sakes we must make henceforth a more rational and determined fight against the disease "tuberculosis," which is our most costly enemy and the most deathly foe of mankind.

Of course, there are certain social reasons for the prevalence of tuberculosis which are also responsible for some of our other social and physical ills. Among them I must mention first the utter ignorance of the vast majority of people who enter into matrimony of the responsibilities they assume as fathers, and mothers of the coming generation. Some great philanthropist or some wise government should take the initiative and establish schools where the responsibilities and obligations of father and motherhood would be taught. To these schools all candidates for marriage should be admitted gratuitously. A course of one or two months would suffice and there should be night lessons as well as day instructions so that those occupied during the day may also have an opportunity to learn. These courses should include family hygiene, home hygiene, eugenics, the science of raising children physically, mentally and morally healthy, and such individual instructions for man and woman as the case may demand, all the work being directed towards enabling the future family to live a normal and happy life.

Next, I must refer to many of the

abnormal industrial conditions of our day and the social injustice arising therefrom—our strikes, the lack of employment in some districts and the lack of workers in others, etc. These conditions must be readjusted, our deserted farms must be repopulated from the congested cities, the lives of the masses must be made happier. When all this is realized, it will not only help in the solution of the tuberculosis problem, but will be a mighty factor in

bringing about what this Conference has been called to consider—a genuine race betterment. But let us not think that this will come about unless we all believe in and work for a larger love of humanity and for more social justice and personal service to our less fortunate brothers and sisters. Some one has said that service to man is the highest service to God. I believe in this with all my heart.

PREPARATION OF MALT AND BEER.

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Malt is obtained by a four-fold treatment of the barley. The grain must be steeped in order to cause germination and produce diastase, the agent necessary for the conversion of starch into that saccharine matter which forms the primary essence of beer; it must be next couched and floored, when it continues to grow and germinate; and, lastly, it must be subjected to kilndrying by which germination is terminated. When this malt, loaded upon ponderous wagons, reaches the brewery, it is at once conveyed by means of most ingenious contrivances, into malt-scales and weighed. On its way to the enormous bins, four in number, which serve as store-houses, it is subjected to repeated processes of sifting, screening and blowing—the latter part being effected by means of air passing through flues or pipes, connected at certain intervals with the chutes through which the malt passes. The storage bins occupy nearly the whole of one wing of the main building. They form one vast shaft, divided into four chambers, running through several stories up to the top floor, and leaving on each floor just room enough for a narrow gallery or corridor. The malt is raised to the tower and thence

distributed into these bins, which together hold about fifty-six thousand bushels of barley, and are so constructed as to facilitate the utmost cleanness in every nook and corner of them.

Crushing the Malt: The same powerful machinery which raises the malt into the store-houses, is now again set in motion to convey the quantity of malt requisite for each brew, from the store-rooms through a series of chutes, shakers, and magnet-studded slides, to and from the scales into the malt mill. On its devious course to this point the malt is shaken upon sieves, rocked to and fro, and constantly accompanied by currents of air, all of which is intended to separate all germs and dust from the malt, and to leave the latter as free as possible from useless and harmful matter. Chutes covered with powerful magnets, serve to attract and hold nails, bits of iron or other similar metallic substances, which may be in the malt. After being weighed—an operation which one man can perform by simply depressing any one of four levers attached to the scales and communicating with the store-bins—the malt is ground, or rather crushed between metal rollers. In its crushed state, it is again conveyed, in the same

mechanical fashion to the top floor, where it is deposited in smaller bins, three in number, each holding 500 bushels. The malt-scales, two in number, one to weigh the malt when it is received, and the other to weigh the quantity needed for each brew, are placed immediately below the store-bins. The double weighing operation enables the brewer not only to calculate, at any time, the quantity of malt consumed and still on hand, but also to determine, with accuracy and without much labor, the exact quantities which he requires from day to day. The latter is very important, because everything depends upon a proper proportion of ingredients.

Simple as these operations may appear from our description, they are, nevertheless, effected by most complicated and costly machinery, in the construction of which human ingenuity was put to a severe test. The principal object of these machines is not, as might be supposed, the saving of labor, but rather the elimination of chance and accident from this preliminary work of the brewer. These most modern improvements preclude almost entirely the many chances of failure to which a less perfect method of sifting malt will always expose the operation of brewing. The presence of any metallic substance or of an excess of germ or dust, will inevitably spoil the wort. The methods spoken of here not only preclude this, but also tend to insure uniformity of quality, and offer, besides, a certain degree of immunity from the danger of explosion, which is ever present in any establishment where the elimination and collection of the malt-dust is effected in a less perfect way. As we have seen, the floors of the west wing of the main building serve the purposes of weighing, sifting and storing malt. On the upper floors of the other parts of this building we find, in separate rooms, the

smaller bins described; tuns for preliminary mashing; the cooling tank, and a number of colossal vats containing water of varying degrees of temperature, heated by exhaust steam.

Mashing and Sparging: Having crushed his malt, the brewer now proceeds to mashing, a most important part of his art. The crushed malt is conveyed from the smaller bins to a "Vormaischbütte," that is to say, a mash-tun in which the malt is thoroughly mixed with water, preparatory to its transfer, to the regular mash-tuns. Neither manual labor nor physical efforts of any kind are required in thus conveying the malt to the mash-tuns; everything moves by steam-power. The object of mashing, i. e., the process of infusion or mixing the malt with water at a proper temperature, is two-fold, viz: First, to extract from the malt the saccharine substance and dextrine which are contained therein; and second, to convert into maltose and dextrine the residue of unconverted starch. The three immense iron tubs, in which the malt is mashed, are set in wooden frames, rising about four to five feet above the flooring. Here, too, the magnificent plant of steam engines, of which we shall speak later on, is brought into application; it sets in motion the mashing apparatus within the tun, which is composed of a number of raking contrivances fastened upon two huge arms, revolving in opposite directions around central pivots, in such manner as to mix every particle of the grain, as it drops from the "Vormaischbütte" on the floor above.

Now is the time to realize the importance of the perfect cleaning and grinding of the malt, for the result of mashing depends in part upon these two preliminary processes. If the malt be insufficiently crushed, much of the extract will be lost, or rather, to be more precise, much of the starch will resist infusion and thus remain bound

up in the grain, which latter then passes out of the tun with a considerable portion of its starch adhering to it. If, on the other hand, the malt be crushed too fine, or if it be insufficiently cleaned, retaining large proportions of dust, a part of the wort will become pasty and absorb much of the "goodness," thus impairing the quality of the beer.

Before the invention of the modern appliances before referred to, the very best raw material frequently failed to yield the results which the brewer was justified in expecting from it, and such failures, the true causes of which were rarely understood, gave rise to trade-superstitions which the modern brewer laughs at, conscious of his superior knowledge.

While the process of mashing is going on, the brew-master must be constantly on the alert; he must watch the temperature of the water, with which he mixes his malt; gauge the effect of the heat upon the quantity and quality of his mash; and determine, at a glance, almost, when to open the valves of the mash-tun, in order to draw off the wort into the copper or boiling kettle below. As in everything connected with brewing, science furnishes him a reliable guide in the shape of a saccharometer, which indicated the proportion of sugar in the wort, and other instruments with which to test the temperature, etc. When the opportune moment has arrived for drawing off the sugar-laden liquid, the brewer opens valves or doors in the bottom of the mash-tuns, through which the wort runs into pipes, and through a filtering apparatus into the boilers on the floor below. While this is going on, and before half of the wort is run off, we witness another operation called sparging, by which the useful substance still remaining in the malt is washed out. By the sparging machine a continuous shower of hot

water is evenly thrown on every part of the grain; it issues from hollow arms, perforated on their reverse sides, and horizontally fixed to an upright pin. As soon as the water begins to force its way out of the holes, in opposite directions, these arms revolve automatically; the raking appliances, meanwhile, continue to whirl around, constantly stirring up the mash, thus enhancing the effect of the water and accelerating the operation. Insufficient or ineffective sparging means a considerable loss to the brewer.

When sparging is completed, the brewmaster changes the scene of his activity; he descends to the floor immediately below the one where his mash-tuns are placed. These two floors are closely connected with each other; in fact, through large openings in the ceilings, which openings are surrounded by substantial guard rails, we gain an almost unobstructed view of both rooms at one and the same time; and even if we knew nothing at all of brewing, the sight of so many pipes, tubes, funnels and shafts connecting the upper floor with the lower, would convince us that the closest relation exists between the two rooms. On this lower floor our attention is at once attracted by three huge copper kettles, every part of which, as well as the many pipes which we see here, at once impresses us with the truth of the saying, that when a brewer is doing nothing, he cleans and polishes his utensils. Indeed, the pride which every journeyman brewer takes in the cleanliness of the establishment is made manifest at every step we take; but here, in the kettle-room, where every object far and near is faithfully reflected, as if in a mirror, upon the resplendent sides of the brew-kettles, an extra effort seems to have been made to outshine every other department.

The liquid which now runs from the mash-tuns into the boiling copper con-

tains all the ingredients which constitute what we may call the body of the beer; it is the extract of a highly nutritious grain, gained in such a way as to justify the designation of liquid bread, which an eminent chemist has assigned to malt liquors. But all the nourishing qualities of the grain have not been extracted; a very large proportion, comparatively speaking, remain in that part of it for which the brewer has no further use. In the brewery under description these grains are conveyed through large pipes from the mash-tuns to the ground floor, or, rather to an archway where wagons may be brought to receive them. They are used as food for cattle and have proved to be the best nutriment for milch cows. According to the exhaustive analysis made by the Agricultural Experiment Station of this State, and many other investigations, brewers' grains, even when no longer perfectly fresh, are usually nourishing and, when fed to milch cows, tend to increase the quantity and enhance the quality of the milk. It is estimated that no less than two-thirds of the bulk of brewers' grains, as they issue from the mash-tun, consist of water, and this moisture not only militates against the transportation of the grain to rural points, but also accelerates decomposition—two reasons which have prevented a more general utilization of the grains by dairymen. A number of grain-drying machines have been invented, and we learn of others in course of construction, by which the grains may be profitably dried and preserved.

Boiling the Wort: The boiling of the wort in these three huge coppers is another one of the essential phases of brewing. The heat required for the boiling is furnished by boilers which send a continuous current of steam through the coils fixed in the copper. These coppers have covers with small sliding floors, which, during the pro-

cess of boiling, are rarely opened except to enable the brew-master to make his tests. Were it not for these covers, the boiler-room would be enveloped in an impenetrable cloud of steam, which would greatly hamper all manipulations. As it is, the steam finds an outlet through a large pipe or flue fixed on top of the copper. It is at this stage that the hop is added to the wort, but not until after the latter has boiled a sufficient time. Usually, the boiling requires four hours; at the expiration of the third hour, or still later, perhaps, the brewer will empty the contents of several large sacks full of aromatic hops into the copper, thus adding the bitter principle to the saccharine. The proper treatment of the hops at and during this stage always has been a matter concerning which few brewers shared the same opinion; but of late scientific investigations have removed many prejudices which arose from a misconception of the nature, ingredients and functions of the plant. At present, the average brewer fully understands that he can extract the essence of the hops without excessive boiling. The object of the boiling is: 1, To concentrate the wort; 2, To extract the essence of the hop; 3, To coagulate the unchanged albuminous substances and cause them to settle, together with the unconverted starch which, if allowed to remain intact, would materially militate against the preservation of the beer. But this does not do justice to the important function of hops; at least it is to be feared that, to the average reader, it will not convey a clear idea of the action of this tender plant upon the wort. Without it, beer would be nothing more than fermented barley-juice, which, as we have seen, was known to the most ancient nations. Without it, beer could not be preserved for any length of time, and both in appearance and flavor would be greatly inferior to the drink

of to-day. Hence, hops not only impart to beers their pleasantly bitter and aromatic flavor, but they also assist in clarification and produce the preservative qualities of the liquid. The two principal substances which the hop-cone yields when boiled, are lupulin and tannin, and it must be the brewer's aim to extract these in just that proportion which the condition and quality of his wort require. Injudicious handling of the hops may result in an excess of tannin and a deficiency of lupulin, and may otherwise work injury to the finished product. The diminutive sparkling grains of the hop-flower, called lupulin, are closely wrapped up in the center of the hop-cone, and should be laid bare before the plant is placed in the copper. To this end most brewers break up the hops, and the writer was shown a most ingenious and yet exceedingly simple machine which performs this operation in a highly satisfactory manner.

Hops, as delivered at the brewery, are packed in large bales, each weighing 180 pounds; the quantities required for immediate use are taken out of these bales, broken on the machine above referred to, and then placed loosely in large canvas bags, provided with hoop-like handles. As a matter of course, these quantities are all carefully weighed before being dumped into the copper. Scientific observation and practical experience have taught the brewer not to boil the hop too long. Formerly the plant was boiled "all to pieces," the object being to expedite the precipitation of the albuminous wort by means of the extracted tannin. At present, the boiling time is reduced to a minimum, and yet, by reason of the opening of the hop-cone, the effects and essential functions of the hop are not in any manner impaired.

In the purchase of hops, the brewer must use good judgment and great care

so as to secure an article rich in lupulin, fully mature, not too old, cleanly picked and properly dried. If he obtains such hops, he may still have room for complaint on account of the lack of that flavor which is the result of long-continued cultivation and the natural advantages of a favorable soil. The latter causes have made Bohemian hops famous all over the world. Any brewer who strives to produce the very highest grade of beer will always use a certain proportion of these extra-aromatic hops in conjunction with the domestic product. For all practical purposes, however, American hops are as good as, if not better than, the average foreign article, with the exception of a few varieties, the production of which is also confined to a rather narrow territory.

Cooling the Brew: When the boiling is completed, the brewer again descends to a still lower floor, where we see, besides many engines, pumps and other gear, a large black rectangular tank which is placed directly under, and connected with the boiling coppers. This is technically called a hop-retainer, or hop-back; the former term undoubtedly more intelligible than the latter, and certainly more appropriate because the function of this tank is to check or retain the hops, while the hopped wort, flowing through open valves in the bottom of the coppers, is being rapidly pumped back to the top floor, where an expansive iron receptacle called the cooling-tank, stands ready to receive it. Poor John Barleycorn! In different conditions he has now made this same trip up and down for the fourth time, and yet the end of his journey is still far off. The contrivance which effects the retention of the hops consists of a perforated false bottom within the hop-back, or, in other words, of a sieve equally as large as the iron tank into which is fitted, and so fixed as to leave between it and the real bot-

tom of the vessel a sufficient space for the reception of the wort. At this stage, the head-brewer thinks of but two things, namely, to send his wort to the cooling tank as rapidly as possible and to have it reach its destination clear and brilliant. For the latter purpose he allows the wort to settle in the hop-back for about twenty minutes; this done, he adjusts the pumps, sets them in motion, and then ascends to the top floor to watch the steaming liquid, as it issues from the pipe and, with a sound between a hiss and a roar, rushes into the tank. If we wish to form an idea of the shape and dimensions of this cooling tank, we must do it now, for in a few moments, as the hot liquid accumulates, a dense cloud of steam, fraught with the enlivening aroma of the hops, begins to fill the immense room, rendering everything indistinct, except when a particularly strong gust of wind rushes through the wide openings in the lattice-work of the windows and for a moment lifts the vaporous veil. The shape of this vessel is that of a gigantic rectangular pan; its depth is three feet; its lateral dimensions are 30x42 feet; its capacity equals that of two of the three boiling-coppers, each one of which holds three hundred and seventy-five barrels.

Although he has the most perfect refrigerating apparatus at his command, our brew-master now evinces considerable anxiety; he is pretty sure of the usual result of his operations; but he knows "there's many a slip between the cup and the lip," or, rather, between the cooling-tank and the fermenting tun; and right here appears to be the only loophole which human ingenuity left to chance. His object is to reduce the temperature of the liquid and render the wort properly amenable, in the desired measure, to the action of the yeast which he will presently add to it, and thus place it

in a fair way for the beginning of fermentation. But unless this is done rapidly, the wort may turn sour, and besides, many believe that other dangers usually accompany a protracted exposure of the liquid to the open air. In many breweries particularly those situated on depressed ground, or hedged in by other high buildings, artificial means are employed to accelerate this first stage of the cooling process.

Cooling is one of the most interesting, as it is one of the most important phases of brewing. The manner in which it is accomplished in model breweries of to-day, impresses us with the greatness of science and its illimitable resources when pressed into service of a progressive industry. Formerly, the successful brewer of lager beer depended very much upon the climate, the supply of ice and the chances of securing what the Germans style "Felsenkeller," rock cellars; that is, deep caverns hewn into the rocks. The refrigerators of to-day completely emancipate the brewer from the thralldom of these contingencies; he can now brew almost anywhere and everywhere, even in Southern climates. Midwinters and consequent scarcity of ice have no terrors for him; and if it were not for his second nature to utilize every natural advantage offered him, he might get along without any cellars, certainly without "Felsenkeller." From the cooling tank the wort is conveyed through pipes into a pan, whence it trickles over two refrigerators. These two refrigerators are on separate floors, one above the other; the one over which the wort passes first is supplied with water from an artesian well; the other derives its cooling capacity from a refrigerating plant, of which we shall presently speak at some length. Having now reached the temperature most suitable for the beginning of fermentation, the wort passes directly into the fermenting tuns.

Fermentation: Fermentation, artificially induced by the admixture of yeast, at the rate of about one pound per barrel, sets in at once and gradually converts the saccharine principle into alcohol and carbonic acid gas, thus imparting to beer that quality which places malt liquors in the category of intoxicating beverages.

While fermentation continues, the same vigilance which prevails in every part of the brewery, must be constantly exercised. The conversion of sugar into alcohol and carbonic acid gas should be gradual, not sudden; hence, when the fermenting process becomes too rapid, either by reason of defective yeast or on account of the unsuitable temperature, it must be restrained by means of attemperators, that is, coils which are placed in the fermenting-tun and connected with the refrigerating plant.

As in all other operations thus far described, so here, too, the prolific genius of our age of inventions has placed at the command of the brewer machineries with which he can regulate the temperature of these oceans of turbulent, forming liquids, either by light pressure of his hand, or by turning of a small wheel, by pressing upon a knob, or by such other equally simple manipulation. In this fermenting room, as well as in the cellars, into which we shall pass presently, everything assumes Titanic proportions, and the human beings who move about these places appear like pigmies. When we see fermenting-tuns holding from three hundred to four hundred barrels, and settling-tuns of the size of an ordinary house, extending through two stories, and holding seven hundred gallons of beer; and when we consider that these monster casks, filled with John Barleycorn's blood, cover miles upon miles of cellar-room, we begin to realize and appreciate the power of the engines which are at work in this brewery.

As fermentation progresses, workmen are constantly in attendance to watch the process. On ladders, almost three times the size of their own bodies, they climb to the top of the tuns to skim the beer with huge ladles, testing at the same time, by taste and touch, the conditions of the liquid mass, in order to determine when to draw it off to the resting-tuns.

The transfer of beer from the fermentation vats to the resting-tuns and from these to the storage casks is accomplished by hydraulic and air pressure, and in such a way as to require no other labor but that of opening or closing valves or depressing levers. As we descend into the cellars, three stories under the ground, the temperature becomes more and more stinging, the walls and ceilings are covered with ice to the depth of from three to five inches, and every vat and cask is thickly encrusted with frost. In forming an idea of the capacity of these cellars we cannot simply depend upon the number of square feet of ground occupied by them, because both vats and casks rise to a height almost equal to that of the cellars, and they vary in capacity from fifty to five hundred barrels. The beer contained in them would float a fleet, since their aggregate minimum capacity amounts to 125,000 barrels.

Final Operations: The last operations to which beer is subjected are those of cleansing, fining and krausening. The beer passes from the settling-vats to the storage casks, in which it remains from three to four months, when, after another winding journey through miles of pipes, it emerges bright and clear and brilliant, only to be racked, that is to say, filled into kegs which go to the retailers.

The same continuity of operations which we have witnessed on the floors above ground, is also observed in the three tiers of cellars, and the relation

between the latter is almost as close as that between the former. We have already indicated the character of the connection which exists between the different kinds of tuns, vats and casks into which the beer is filled at different stages after the brew is completed. We have seen that fermentation takes place in open vats, and is regulated by attemperators, fed by the refrigerating plant and by means of powerful pumps. Formerly, another means of restraining fermentation, which was applied manually, was resorted to; it consisted of conical cans, called swimmers, which the brewer filled with ice and placed in the fermenting liquid, where they floated about and depressed the temperature.

When the desired results of fermentation into beer are secured, then, and not until then, is the wort transformed into beer, but before it becomes fit for consumption, it must rest for a considerable length of time, to be then transferred to the storage casks, where the processes of finding and krausening take place. For the former process, chips or shavings are used, usually those gained from the beech-tree, by which the muddy particles, resulting from fermentation and still remaining in the beer, are attracted and held, leaving the bulk of the liquid clear and translucent. While this is going on, large quantities of carbonic acid gas continually escape from the lager-casks, and, ultimately, in order to re-enliven the liquid, a second fermentation must be produced by adding one-fifth of a new beer to four-fifths of the old. This is done by means of pipes which convey the new beer through two tiers of cellars to the lager-casks.

Mashed, sparged, boiled, cooled, doubly fermented, clarified and thoroughly aged, the beer is now ready for racking. This is done by several gangs of men at the same time. The

quantity to be racked and the capacity of the packages to be filled being known, the foreman is enabled to determine how many kegs must be held in readiness. Each "racker" has a given number of kegs before him. Above a wide board, which runs along the wall, there is a long row of faucets through which the beer, drawn from the lager-casks, flows into a detachable hose and thence into the kegs. When one keg is full, the hose is quickly inserted into another, and while this is being filled up, the first is being closed up with wooden bung tightly hammered into the bung-hole. In the lower end of the pipes, to which the faucets are attached, glass tubes are inserted, which enable the "racker" to discover immediately the slightest change in the color or clearness of the beer. When such a change occurs, the stream of beer must be turned off at once, because the presence of muddy particles indicates that the sediment in the lager-casks has been reached and is being stirred up.

The kegs are now ready for delivery to the retailer, and pass out of the proper domain of the brewer, until they are returned empty and are again conveyed to the wash-house, or perhaps, if their condition should require it, to the pitching-yard or to the cooper shop.

The United States Census Bureau's mortality report for 1912 shows the lowest death rate yet—13.9 per 1000 in area covering 63 per cent of our population. In 1880 the Census Bureau showed a mortality rate of 19.8 per 1000; in 1900 the mortality rate was 16.5 per 1000. To their shame it must be said that 24 commonwealths still have no state laws requiring statistics of births, sickness and deaths and among these delinquents are Illinois and Kansas.

SOUTHERN CALIFORNIA PRACTITIONER

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This journal endeavors to mirror the progress of the profession of California and Arizona.

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EDITORIAL

RADIUM THERAPY.

What do you know about Radium? Do you use it? Have you any cases in which it would save suffering or life?

The discovery and introduction into therapy of radium has raised so many interesting and practical questions that we are glad to present to our readers this month an article on the subject by Dr. Howard A. Kelly, of Baltimore, whose accumulation and use of radium would seem to justify the title "radium king," that has been imposed upon him by some enthusiasts. Dr. Kelly has for years held a leading place among our American operators, being known throughout the civilized world for his surgical dexterity, so that his statements regarding the use of radium bear more weight than if they were from one less well known or who was not familiar through experience with the possibilities of surgery, especially in malignant diseases.

TUBERCULOSIS NURSES.

A million people in the United States have tuberculosis now. Such is the statement of the National Association for the Study and Prevention of Tuberculosis. Of this number a fair proportion is in Los Angeles. The Los Angeles Department of Health has succeeded in getting reports of some two thousand cases during the past year. In the Los Angeles County Hospital, a census of the tuberculosis patients last month showed that the average term of residence in Los Angeles of those then in the institution was a little over six years. If we have two thousand new cases per year, as reported to the Health Department, and the average duration here is six years, it would seem that Los Angeles must have some twelve thousand cases of tuberculosis.

If we take the total population of the United States as one hundred million, and Los Angeles as one-half million, then if there are one million cases of

tuberculosis in the United States, the proportion for the population of Los Angeles would be only five thousand. But we have more than our equal proportion of tuberculosis in Los Angeles.

In the past, in the United States, the tuberculosis problem has been met chiefly through the formation of state and local anti-tuberculosis societies to the number of more than 800; the establishment of some 500 hospitals and sanatoria with over 30,000 beds for consumptives; 400 dispensaries with more than 1000 physicians in attendance; more than 150 open-air schools for tuberculous and anemic children; the passage of tuberculosis laws in 45 states and more than 200 cities; and, last but not least, active educational campaigns in 40 states and territories by means of lectures, exhibits, the press, the distribution of literature, etc.

For the future, the proper care of the tuberculosis problem demands the provision of hospital beds for at least 100,000 indigent consumptives in advanced stages of the disease; the establishment of sanatoria for at least 100,000 early cases; provision for visiting nurses, tuberculosis clinics, and open-air schools in every city and town in the United States; and, furthermore, the continuous education of over 90,000,000 people, concerning the necessity for proper personal and public hygiene in the prevention of tuberculosis.

With all the great volume of tuberculosis in Los Angeles, we have only one municipal tuberculosis nurse, who

is unable to attempt much more than a single visit upon the reported cases. Columbus, Ohio, has five tuberculosis nurses. New York City, with about ten times as many reported cases, has 165 tuberculosis nurses, and has reduced the mortality there so that now tuberculosis is fourth in the causation of death, instead of being first, as it was formerly in New York and still is in Los Angeles. Council has been asked to provide for a corps of eighteen tuberculosis nurses, which would seem to be a very small number to do the work required in Los Angeles.

Physicians in this region will welcome such a force of tuberculosis visiting nurses. They should be sent to both public and private cases, regardless of the patient's financial condition, just as we do not consider the individual's finances when there is a call for the services of other officers of the Health Department, or of the Police or Fire departments of the city government. This will be a great help to physicians. In Cleveland, the tuberculosis nurses are sent to all reported cases, after communicating with the physician in charge, unless the physician raises an objection. During the past year there were less than a dozen cases in which the physician requested that the nurse be not sent, and in those cases the reason assigned for the objection was the desire to not let the patient know the diagnosis. Such assistance will relieve the physician of a vast amount of onerous work that is only too often neglected.

EDITORIAL NOTES

Dr. C. W. Pierce has removed his offices to the Brockman Building.

Drs. Frank D. and Rose Bullard now have their offices in the Marsh-Strong Building.

Dr. J. H. McBride, president of the

Board of Education of the city of Pasadena, has resigned.

Euripides, 400 B. C., said: "It is a good thing to be rich, and a good thing to be strong; but it is a better thing to be beloved by many friends."

Desirable office for rent in suite with other physician. Inquire 1131 Black Building, cor. Fourth and Hill streets.

Dr. Ethel Leonard has moved to the Marsh-Strong Building and Dr. Edward D. Lovejoy to the Brockman Building.

Dr. Lee M. Ryan—Rush 1906—is Medical Director of the Southern Sierras Sanatorium for the Tuberculous at Banning, Cal.

Young men desiring to enter the United States Army as surgeons would do well to see Lieutenant-Colonel Wm. E. Purviance, U. S. A. Recruiting Office, 432 S. Main Street, Los Angeles.

Dr. Francis H. Mead of San Diego, in a recent issue of the **Medical Record**, announces that ten drops of a saturated solution of menthol in spiritus vinirect., in a little hot water will promptly cure persistent hiccough.

Dr. J. S. Baer of South Pasadena, aged 59 years, died suddenly at his home January 19. Dr. Baer was a thirty-second degree Mason and is survived by his widow and a married daughter. He graduated from Jefferson Medical College 1888.

Drs. Macleish and Macleish after eighteen years in the Bradbury Building have joined the hegira to the Brockman Building. Drs. Everett R. and Rea Smith, with Dr. C. W. Anderson and Dr. Arthur Stanley Granger, have also gone to the Brockman.

Dr. A. F. Huntoon, aged 62 years, died in Los Angeles January 12, 1914. Dr. Huntoon graduated from the Missouri Medical College, class of 1881, and had been practicing in Los Angeles ten years. His son, Dr. Harry A. Huntoon, is one of the well-known Los Angeles practitioners.

W. O. Henry, M.D., formerly of Omaha, Professor of Gynecology in the Medical Department of Creighton University, Gynecologist to the St. Joseph

and Douglas County Hospitals, and Surgeon to the Presbyterian and Omaha General Hospitals, has removed to The Darby, Los Angeles.

Dr. M. M. Kannon, aged 57, died in Los Angeles January 10, 1914. Dr. Kannon had lived in Los Angeles over a quarter of a century and was very prominent in Irish Catholic circles. He graduated from the Medical Department of University Bishop's College, Montreal, class of 1879.

Dr. J. Wilson Shiels, who has been one of the prominent physicians in San Francisco for the last fifteen years, spent a few days in Southern California a short time ago. Dr. Shiels graduated from the Royal College of Physicians and Surgeons, Edinburgh, in the class of 1895. Besides being an eminent member of the profession, the doctor is a natural humanist, and as an amateur playwright, has delighted thousands.

Florence Nightingale's biography, just issued by Macmillans, is an intensely interesting work. She was the daughter of a wealthy English squire. She was but a child when she began to astonish and distress her family with aspirations for some career of usefulness, but she did not enter her destined career, which began in Turkey, until she was 34 years old. She was beautiful, graceful and an aristocrat in appearance and manner.

By natural increase the white population about triples itself in forty years, while the black doubles itself. Hence the latter must form an ever-diminishing fraction of the whole population. The following figures (the number of negroes per thousand of the whole population) will tell the story:

1790	1800	1810	1820	1830	1840	1850
193	189	190	184	182	168	157
1860	1870	1880	1890	1900	1910	
141	127	131	119	116	113	

—The Los Angeles Examiner.

The Riverside County Medical Society met at the home of Dr. W. W. Roblee, January 12th, with 26 in attendance, the guests being physicians from Los Angeles, Redlands, San Bernardino, Corona, Banning, Beaumont, Hemet and Rialto. Dr. F. A. Speik of Los Angeles and Dr. C. Van Zwalenburg gave the addresses of the evening, which were liberally discussed at their conclusion. Late in the evening a delicious oyster supper was served and the unanimous thought was that Dr. and Mrs. Roblee had given them a delightful evening.

The Life Extension Institute recently incorporated in New York includes "a Hygienic Reference Board of nearly a hundred leading experts on various subjects pertaining to health, the purpose of which is to help determine the truth on hygienic questions referred to it." The Board will aim ultimately to settle scientifically, as far as possible, the many disputed questions of personal hygiene. The Institute will be used by insurance companies to give advice free of charge to its policy holders. In other words, the ailing instead of going to a single physician for advice, will go to this Board and be scientifically and collectively sat upon.

Dr. S. Weir Mitchell's death at his home in Philadelphia from la grippe at the ripe age of 84, removes America's greatest literary-scientific character. His was a well balanced manhood. The emphasis he gave to the value of rest in the treatment of neurasthenics has proven of great value to the world. His fiction has a patriotic purpose. Every American girl and boy should read "Hugh Wynne," his most popular novel. Dr. Mitchell was a graduate of Jefferson Medical College and his father—a physician of note—was for many years professor in that institution.

Dr. Henry Sherry of Pasadena usually carries a smile around with him, but the following from the Los Angeles Daily Times indicates that he can get awfully worked up:

"SOUTH PASADENA, Jan. 9.—(To the Editor of The Times:) Accept my gratitude for the editorial in this (Friday) morning's issue on the sex question in public schools. If a medical man raises his voice against this insidious fad, he is dubbed a decadent. I know of nothing under the head of reform that needs reforming more than this abomination.

"HENRY SHERRY, M.D."

BOOK REVIEWS

CASE HISTORIES IN PEDIATRICS.

A collection of histories of actual patients selected to illustrate the diagnosis, prognosis and treatment of the diseases of infancy and childhood, with an introductory section on the normal development and physical examination of infants and children. By John Lovett Morse, A.M., M.D., Associate Professor of Pediatrics, Harvard Medical School; Associate Visiting Physician at the Infants' Hospital and at the Children's Hospital, Boston. Second edition. Boston. W. M. Leonard. Publisher. 1913.

This volume of case histories is so arranged that it is a veritable clinical mental gymnasium for the student. Of course, you probably will not agree

with the writer in all "cases." Thus we note a case of "infantile pyloric stenosis," page 125, in which we are informed that "The physical examination verifies, of course, the diagnosis made on the history," and "the prognosis without operation is hopeless." We might venture the remark that we have known cases in which the physical examination did not support the diagnosis that would have been made from the history alone; and furthermore, we have known of recovery of these cases without operation. The

condition is sometimes only an evidence of tardy development, disappearing in a short time, during which the child may be nourished by careful feeding and the daily use of the stomach tube.

A TEXT-BOOK OF HISTOLOGY. By Frederick R. Bailey, A.M., M.D. Fourth Revised Edition, profusely illustrated. New York, William Wood & Co., 1913. Price \$3.50 net.

The general plan and scope of this work remains the same as in the first edition. The text has been thoroughly revised and some parts of it re-written. The primary aim of the writer has been to prepare a text-book of histology for use in connection with practical laboratory instruction, and especially to furnish to the instructor of histology a satisfactory manual for class-room teaching. It is an excellent text-book.

CLINICAL DIAGNOSIS AND URINALYSIS. By James R. Arneill, A.B., M.D., Professor of Medicine and Clinical Medicine in the University of Colorado, and Physician to the Denver County Hospital and the St. Joseph and St. Luke's Hospitals of Denver. New (second) edition, revised and enlarged. 12mo., 270 pages, with 83 engravings and a colored plate. Cloth, \$1.00, net. The Medical Epitome Series. Lea & Febiger, publishers, Philadelphia and New York. 1914.

In the day of the treatise and the monograph it again is a distinct achievement, even for Dr. Arneill's skilled hand, to bring so extensive a subject as Clinical Diagnosis within the compass of an "Epitome." In addition to the customary tests of the blood, stomach contents, feces, sputum and urine, space is found for such procedures as Wright's coagulation test, cryoscopy, tests for anaemia, leukemia, trypanosomiasis and leukocytosis, Thalmann's gonococcus stain and spinal fluid tests for albumen and dextrose. The revision embodies all the recent advances. Particularly practical and timely are the sections on the examination of the stomach contents, and on serum reactions, including discussions

of the Widal, Wassermann, Noguchi, butyric-acid and cobra venom tests.

A TEXT-BOOK OF PHYSIOLOGY FOR MEDICAL STUDENTS AND PHYSICIANS. By William H. Howell, Ph.D., M.D., Professor of Physiology, Johns Hopkins University, Baltimore. Fifth edition thoroughly revised. Octavo of 1020 pages, fully illustrated. Philadelphia and London: W. B. Saunders Co., 1913. Cloth, \$4.00 net; half morocco, \$5.50 net.

The present edition brings this standard work fully abreast of current investigations in physiology. The active work going on in physiology and physiological chemistry has added greatly to our knowledge of intermediary metabolism in the body, and in some respects has brought into question what before were considered established theories or principles in regard to the process of nutrition. The indication, for example, that the animal body under certain conditions may obtain some of its necessary nutrition for the synthesis of protein from inorganic sources would have seemed almost impossible a few years ago. It is an excellent text-book for the student and a reliable guide to the physician who would keep abreast of the times.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume II, Number VI (December). Octavo of 186 pages, illustrated. Philadelphia and London: W. B. Saunders Co., 1913. Published bi-monthly. Price per year: Paper, \$8.00; cloth, \$12.00.

The first article in this issue is on tuberculosis of the lung, dealing with the production of artificial pneumothorax by the injection of nitrogen as advocated by Dr. Murphy. To those who remember the furore created after the demonstration of this method by Dr. Murphy at the Denver meeting of the American Medical Association, the following extract will prove entertaining:

"After delivering the address at the American Medical Association meeting, the lay press took it up and published this method of treatment of tuberculo-

sis of the lung, 'as a cure.' The result was that when I returned home, after a vacation in the mountains, I found my room packed three feet deep with mail from persons who asked about the treatment. The first time in my life that I was ever frightened was when I saw that mass of mail."

SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF BACTERIOLOGY. New Seventh (7th) Edition. By M. V. Ball, M.D., formerly Instructor in Bacteriology at the Philadelphia Polyclinic. Seventh edition, revised. Assisted by Paul G. Weston, M.D., Pathologist State Hospital for Insane at Warren, Pa. 12mo of 321 pages, with 118 illustrations, some in colors. Philadelphia and London: W. B. Saunders Co., 1913. Cloth, \$1.00 net.

This book first appeared in 1891, being one of the first American publications on the subject of bacteriology. The appearance of this 7th edition is evidence that there is a place in literature for this style of compend. Such works possess a peculiar value in that they may be issued in a short time and therefore are more up-to-date than the more cumbersome large text-books.

GENITO-URINARY DISEASES AND SYPHILIS. By Edgar G. Ballenger, M.D., Adjunct Clinical Professor of Genito-Urinary Diseases, Atlanta Medical College; Editor Journal-Record of Medicine; Urologist to Wesley Memorial Hospital; Genito-Urinary Surgeon to Davis-Fisher Sanatorium; Urologist to Hospital for Nervous Diseases, etc., Atlanta, Ga., assisted by Omar F. Elder, M.D. The Wassermann Reaction by Edgar Paullin, M.D. Second edition revised; 527 pages with 109 illustrations and 5 colored plates. Price \$5.00 net. E. W. Allen & Co., Atlanta, Ga., 1913.

The writers have incorporated in this edition the following notable improvements: the more satisfactory treatment of gonorrhoea; vaccine therapy; Roundtree and Geraghty's test for functional activity; pyelography; the Wassermann reaction and leutin test; the use of the dark field illumination in the demonstration of the spirochaeta pallida; the inoculation of animals with syphilis and the discovery of salvarsan and neosalvarsan. The rare

affections and unusual operations received brief treatment. Special attention is called to the treatment of incipient gonorrhoea by sealing argyrol in the anterior urethra with collodion, thus causing it to be retained in contact with the infected mucosa until the patient urinates. The prolonged action of a four or five per cent solution of argyrol has a most satisfactory effect and if the organisms have not extended more deeply than the part so medicated, the patient will be cured in four or five days. Little irritation is produced by the treatment and the discharge often is not seen after the first treatment.

HISTORY OF MEDICINE, WITH MEDICAL CHRONOLOGY, BIBLIOGRAPHIC DATA, AND TEST QUESTIONS. By Fielding H. Garrison, A.B., M.D., Principal Assistant Librarian, Surgeon-General's Office, Washington, D. C.; Editor of the "Index Medicus." Octavo of 763 pages, many portraits. W. B. Saunders Co., Philadelphia and London, 1913. Cloth, \$6.00 net; half morocco, \$7.50 net.

Here we have an outline of the history of medicine that must appeal to the medical student or the busy practitioner. It is replete with important facts, many of which are of practical value. It is interesting to note that the Twentieth Century is treated of under the caption "The beginnings of organized preventive medicine," and treats largely of the cultural and social aspects of modern medicine.

THE WHITE LINEN NURSE. By Eleanor Hallowell Abbott. Author of "Molly Make-Believe," "The Sick-a-Bed Lady." With illustrations by Herman Pfeiffer. New York. The Century Co., 1913.

The central characters in this piece of fiction are a little trained nurse with a doll face that belies her strength of character; an overworked surgeon who seeks relief in profanity and a yearly excursion with John Barleycorn, and his pathetic little daughter, whose sharp temper hides her hungry heart. It is a delightful little piece of literature well suited for the waiting room.

DENTIST'S DIARY, 1914. The book that breathes the new spirit in dentistry. Lehn & Fink, Publishers, New York.

In this edition one day is allowed to a page. Particular attention is paid to oral hygiene, especially with regard to children in schools. We commend both the spirit and the book.

DORLAND'S AMERICAN ILLUSTRATED MEDICAL DICTIONARY. A new and complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology, and kindred branches; with new and elaborate tables. Seventh revised edition. Edited by W. A. Newman Dorland, M.D. Large octavo of 1107 pages, with 331 illustrations, 119 in colors. Containing over 5000 more terms than the previous edition. Philadelphia and London: W. B. Saunders Co., 1913. Flexible Leather, \$4.50 net; thumb indexed, \$5.00 net.

The present edition of this standard work represents the work of the editor and his assistants during the past two years. Over 5000 new terms have been defined. The general features of the previous edition have been retained. It is a handy dictionary, convenient in size and sufficiently complete.

THE TREATMENT OF RHEUMATIC INFECTIONS. Press of Parke, Davis & Co., 1913.

This volume presents the treatment of a variety of rheumatic infections with Phylacogen in a way that will be helpful to physicians. The clinical evidence here presented goes a long way toward establishing the value of Phylacogen therapy. The principle upon which the Phylacogens is founded is briefly the theory of multiple infections. The degree of potency or energy of the Phylacogen has been carefully ascertained by laboratory experiments on animals, some 800 of which were used in these investigations. The use of the Phylacogens is seemingly contrary to generally accepted biological theories and without precedent in therapeutics, so that former experiences in the treatment of conditions for which they are to be used are not reliable guides as to their use. Parke, Davis and Company deserve great credit for

the money and effort they have expended in developing these remedies.

PRINCIPLES OF SURGERY. By W. A. Bryan, A.M., M.D., Professor of Surgery and Clinical Surgery at Vanderbilt University, Nashville, Tenn. Octavo of 677 pages with 224 original illustrations. Philadelphia and London: W. B. Saunders Co., 1913. Cloth, \$4.00 net.

While the title of this book is "Principles of Surgery," its real significance would possibly be more correctly expressed by the single word "Principles," for while the text presents the facts upon which surgical diagnosis and treatment rest, it at the same time covers elemental teachings which as surely concern every other branch of medical practice, especially inasmuch as the majority of surgical cases must come at first into the hands of the general practitioner of medicine. It is interesting to note the tendency of surgical teachers to invade the realm of medicine.

The treatment of shock: The first, and perhaps the most important, lesson to be learned is that stimulants are contra-indicated; the inhibitory centers of the heart are out of commission, and the heart therefore runs away. The patient should be placed in an inclined position, head downward, or, if this is impossible, he should at least be allowed to occupy the horizontal position and the head should not be raised for any purpose. Artificial heat should be applied abundantly at the earliest moment and maintained. High temperature of the atmosphere should not cause one to forget this. The legs, arms, and abdomen should be bandaged firmly enough to prevent accumulation of blood in the vessels and to force it on toward the heart. If the patient is in pain, or restless, sufficient morphine should be administered hypodermically to relieve the symptoms. A moderate dose of it is not amiss in any case of shock. The only other drug that seems to be of much importance is adrenalin chlorid, of which 10 to 20 minims of

the 1:1000 solution may be injected hypodermically, and repeated when found necessary. The injection of normal salt solution subcutaneously or intravenously is positively indicated when shock has been associated with hemorrhage, and, although it does not appear necessary from animal experimentation, it seems unquestionably to be of great advantage in clinical work when there is no hemorrhage. In the more severe cases the intravenous method is preferable.

INTERNATIONAL CLINICS. A quarterly of illustrated clinical lectures and especially prepared original articles on treatment, medicine, surgery, neurology, paediatrics, obstetrics, gynecology, orthopedics, pathology, dermatology, ophthalmology, otology, rhinology, laryngology, hygiene, and other topics of interest to students and practitioners. By leading members of the profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, with the collaboration of John A. Witherspoon, M.D., Nashville, Tenn.; Sir Wm. Osler, M.D., Oxford; A. McPhedran, M.D., Toronto; Frank Billings, M.D., Chicago; Charles H. Mayo, M.D., Rochester; Thomas H. Rotch, M.D., Boston; John G. Clark, M.D., Philadelphia; James J. Walsh, M.D., New York; J. W. Ballantyne, M.D., Edinburgh; John Harold, M.D., London, and Richard Kretz, M.D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipzig, Brussels, and Carlsbad. Volume IV, Twenty-third Series, 1913. Philadelphia and London: J. B. Lippincott Co. Price \$2.00.

Among the interesting monographs of this issue, we note especially the one on *Azurophile Micro-organisms*, by F. Proescher, M.D., of Pittsburg. It is claimed that the following infectious diseases are due to a filterable virus: Yellow fever, verruca vulgaris, trachoma, poliomyelitis, typhus fever, sand-fly or three-day fever, and measles. The same claim is made concerning a number of diseases common to both man and animals, such as foot and mouth disease, rabies, vaccinia, and variola; and of diseases of animals, such as peripneumonia or cattle, African horse sickness, swamp fever of horses, agalactia contagiosa of sheep (blue tongue), cattle plague, sheep-pox, pernicious anemia of horses, dog

distemper, stomatitis papulosa bovis specifica, guinea-pig epizootic, a peculiar paralysis of guinea-pigs, fowl pest, fowl diphtheria, which is identical with the epithelioma contagiosum of fowls, leukaemia of fowls, and fowl sarcoma; of plants, the mosaic disease of tobacco.

Proescher then raises the question as to whether filterability necessarily means invisibility. 0.21 microns must be taken as the limit of direct visibility. For the sake of comparison, we may state that the diameter of the red blood cell is about 7.5, and the length of the influenza bacillus 1.2. The pores of the better filters may be as small as 0.2 micron. Proescher claims to have stained and demonstrated the virus of smallpox, poliomyelitis, and rabies, thereby showing that filterability should not be confounded with microscopical invisibility.

DISEASES OF THE NERVOUS SYSTEM, for the General Practitioner and Student. By Alfred Gordon, A.M., M.D., Paris. Late Associate in Nervous and Mental Diseases, Jefferson Medical College; Late Examiner of the Insane, Philadelphia General Hospital; Neurologist to Mount Sinai Hospital, to Northwestern General Hospital and to the Douglass Memorial Hospital; Member of the American Neurological Association; Fellow of the College of Physicians of Philadelphia; Corresponding Member of Societe Medico-Psychologique De Paris, France; Member of the American Institute of Criminal Law and Criminology. Second edition, revised and enlarged with 169 illustrations. Philadelphia: P. Blakiston's Son & Co., 1913. Price, \$4.00 net.

This edition has been enlarged. Among numerous additions the following important articles may be mentioned: Fracture of the skull; concussion of the brain; lumbar puncture; cerebral spinal fluid; the Wassermann's reaction, radiculitis and psychoanalysis. We would commend the use of bold-faced type as found in this volume, to indicate important subjects and subheads.

By radiculitis is understood a primary inflammation of the roots of nerves. Secondly the nerve roots may be involved in lesions of peripheral

nerves or of the spinal cord (poliomyelitis, syringomyelia, etc.) and in traumatic injuries. But radiculitis means a primary infection or toxic inflammation of the roots and their coverings.

The onset of radiculitis may be rapid or slow. The first is rare; it may occur in the course of cerebrospinal or spinal meningitis. The second, which is the usual onset, consists of slowly but progressively developing manifestations. The most frequent form is cervicobrachial radiculitis of tertiary syphilis. Gradually and apparently without cause, various paresthesiae and pain develop in the cervical region. Pain is continuous, but is interrupted by paroxysms of a violent character. The latter are brought on by an effort, cough or sneezing. The exacerbations make the patient scream and Dejerine with others described this phenomenon "sign of sneezing" as a reliable symptom of the disease. The pain radiates along the course of the nerve trunks. Pressure provokes pain. It can be elicited at the level of the sixth transverse process (Erb's point). Gradually the nervous filaments undergo degeneration and destruction and the hyperesthesia is replaced by anesthesia; pain then disappears. Not only the skin but also muscles, bones and joints have lost their sensibility. Perception of position and stereognostic sense are abolished. For this reason ataxia becomes evident. Whether the loss of sensation is complete or incomplete, it is always radicular in distribution and the latter is characteristic of the disease. There may be motor and trophic symptoms as well as sensory.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By James M. Anders, M.D., Ph.D., LL.D., Professor of Medicine and Clinical Medicine, Medico-Chirurgical College, Philadelphia. Eleventh edition thoroughly revised. Octavo of 1335 pages, fully illustrated. Philadelphia and London: W. B. Saunders Co., 1913. Cloth, \$5.50 net; half Morocco, \$7.00 net.

The popularity of this text-book is attested by the fact that it was copy-

righted by Saunders in 1897 and this is the eleventh edition. Wonder if you are familiar with the following which are among the more important additions in the present volume?

McPhedran's sign of peritonitis in typhoid fever, Burke's reflex sign in typhoid fever, Prendergast's test in typhoid fever, phlebotomy and transfusion in hemorrhage of typhoid fever, hot-air inhalations in diphtheria, Lee's sign in acute articular rheumatism, Iron's method of diagnosis of gonorrhoeal arthritis, Pastia's sign of scarlet fever, copper arsenite and copper sulphate in amebic dysentery, Erb's syphilitic spinal paralysis, Weil's test in syphilis, vegetable days in diabetes, sugar solution in diabetic acidosis, effect of atophan in gouty subjects, radium emanations in gout, salvarsan and sodium cacodylate in progressive pernicious anemia, benzol in leukemia, vaccine treatment of goiter, hexamethylenamine in acute bronchitis, artificial pneumothorax in hemoptysis, Schepelmann's sign in acute plastic pleurisy, oxygen in sero-fibrinous pleurisy, Stern's sign in tricuspid incompetency, Graham-Steell murmur in pulmonary incompetency, Karell milk-cure in valvular heart disease, electricity in arterial sclerosis, diastolic expiration in aneurysm, Boas' method of testing motor function of the stomach, McCaskey's method of treating gastroptosis, Meiostagmin reaction in gastric cancer, Falk and Salomon's reaction in gastric cancer, larval superacidity, Boas' phenolphthalein test for diagnosis of intestinal disease, Bastedo's test in appendicitis, chloride retention theory of renal dropsy, circumscribed serous spinal meningitis, progressive lenticular degeneration, dysbasia lordotica progressiva, myotonia atrophica, and the Towns-Lambert method of treating morphinism.

Of the new subjects which have been discussed, the following may be enu-

merated: Diseases of the parathyroid gland, auricular fibrillation, auricular flutter, extra systole, streptococcus tonsillitis, stenosis of the duodenum, Lane's kink of the ileum, status thymico-lymphaticus. In addition the following subjects have been rewritten: Antityphoid vaccination, diseases of the thymus gland, and pellagra.

MATERIA MEDICA, PHARMACOLOGY, THERAPEUTICS AND PRESCRIPTION WRITING. For Students and Practitioners. By Walter A. Bastedo, Ph.G., M.D., Associate in Pharmacology and Therapeutics at Columbia University. Octavo of 602 pages, illustrated. Philadelphia and London: W. B. Saunders Co., 1913. Cloth, \$3.50 net.

The author of this work has attempted to emphasize the importance of research both in the laboratory and at the bedside, and to point out any discrepancy between the value of a remedy as established by research and its supposed value in clinical therapeutics.

Bastedo gives the following excellent resume of the anthracene derivatives. These are the chemicals, phenolphthalein and other phthaleins, and the vegetable drugs, aloes, frangula, cascara, rhubarb, and senna. These depend for their activity upon a resinous body, emodin (trioxyme thylanthraquinone), and cathartinic acid, or upon close relatives of these. Beyond all other drugs, the anthracene derivatives are preferred in habitual constipation, especially that of the atonic type. They are not so good in spastic constipation. By long experience it has been found that they do not to any great extent lose their efficiency by repeated use, and in many instances are taken daily, year in and year out, without even the necessity of increasing the dose. It has been noted further that often a small dose taken three times a day will be just as efficient as a much larger total quantity taken in one dose at bedtime.

MISCELLANEOUS

SEROBACTERINS OR SENSITIZED BACTERIAL VACCINES.

A Distinct Advance in Bacterial Therapy.

Bacterin or vaccine therapy, carried out by the use of killed bacteria, has now been successfully applied to the prevention and treatment of many infectious diseases. Clinical experience has proven beyond question that these products produce a degree of immunity which enables the person treated to resist infection and which is of great value therapeutically. The length of time required before the immune condition is present and the local and general reactions which sometimes follow the first and occasionally subsequent doses are, however, factors calling for improvement.

To remedy the first of these defects, experiments were made with mixtures

of serum and killed bacteria, with the idea that by this means immediate passive immunity could be had, as well as a more permanent active immunity, but this procedure resulted in failure, as only a slight degree of passive immunity was secured and no active immunity whatever. Besredka attributed this failure to the excess of serum present in such mixtures, and for the preparation of his "sensitized vaccine" took advantage of the discovery of Ehrlich and Morgenroth that bacteria mixed with a serum containing specific antibodies unite permanently with such antibodies. After maceration in the immune serum for a sufficient time the sensitized bacteria are recovered by centrifugalization. The bacteria, with their antibodies attached, are then washed in the centrifuge with physiological saline solution until all traces

of serum are removed. Careful complement fixation and animal tests are employed to make sure that proper sensitization has taken place, and finally the bacteria are made up into standardized suspensions for administration. Since the value of sero-bacterins depends on thorough sensitization, and the complement fixation test proves the extent to which this has taken place, this test constitutes a vital part of the technic.

Besredka claims that sensitized bacterial vaccines or "sero-bacterins" possess a great advantage over the bacterial vaccines now in common use, in that their action is far more rapid, and they produce no clinical or opsonic negative phase, and no focal or general reactions. His researches have been confirmed by such prominent investigators as Marie, Remlinger, Dopter, Theobald Smith, Metchnikoff, Gordon and others, all of whom found that sensitization of bacteria confers upon them new properties which render them highly effective as vaccines, free from the defects of the ordinary bacterial vaccine and "possessing an action which is **certain, inoffensive, rapid and lasting.**"

A large number of favorable reports have appeared on the value of serobacterins in the preventive and curative treatment of such diseases as cholera, plague, typhoid fever, dysentery, streptococic and pneumococic infections, gonorrhea and even tuberculosis and rabies. Sensitized plague vaccine is now official in the French Pharmacopœia, sensitized tuberculin is coming into very general use in Germany and other European countries, and sensitized rabies vaccine, on account of the rapidity and greater certainty of its action, has been adopted as the official Pasteur treatment.

The underlying principle explaining the action of serobacterins, according to Besredka, is that the bacteria prepared by sensitization are rapidly devoured

by the phagocytes, and this is the cause of the absence of unfavorable reactions following their use. The combining of antibodies and bacteria outside the body disposes of a long-drawn-out preliminary process which, with the bacterial vaccines, must be done by the patient's body cells. In serobacterins, this combination of antibodies with the bacteria being already performed, their action is immediate and free from local and general reactions.

The action of serobacterins may be characterized as follows:

1. **Certain**—Because the bacteria are already prepared for phagocytosis and intra-cellular digestion.

2. **Rapid**—An effective immunifying response follows the first injection in from 24 to 48 hours.

3. **Harmless**—Being saturated with antibodies, the serobacterins do not absorb any of those present in the blood of the patient, and consequently cause no opsonic or clinical negative phase. They are free from toxic action.

4. **Permanent**—Animal experiments prove that the immunity secured from the use of serobacterins or sensitized bacterial vaccines is more permanent than that following the use of bacterial vaccines.

The rapid production of active immunity marking the action of serobacterins is invaluable in both the treatment of disease and preventive immunization. In treatment of a patient infected with rapidly multiplying pathogenic bacteria, the prompt immunizing response should overcome the infection before it causes serious damage. In preventive immunization, especially in epidemics, the advantage of securing immediate immunity should make the use of serobacterins almost obligatory.

Sensitization is a delicate and complicated procedure which can be successfully carried out only in especially equipped laboratories by experts of the highest type. The difficulties surround-

ADVERTISEMENTS.

ing the preparation of sensitized vaccines have up to the present time prohibited their general use, and the production of this superior vaccine on a scale that will make its use possible in every-day practice marks an important step in bacterial therapy.

A very complete review of this most interesting subject appears in *The Mulford Digest* for December, and we suggest that any physician who has not received a copy of the December Digest containing this review should secure one.

THE SENTIMENTS OF A NURSE.

Whether these words will ever see print or not, I do not know, but the desire has long been slumbering to put into black and white a few observations with regard to the attitude of the physician toward the nurse. Is the nurse a paid machine, or is she the right hand of the physician? Many times during her attendance upon him, must she ask herself such a question. With some she feels instinctively that she is indeed the physician's helper, as she has dreamed and hoped to be; but alas, at times she feels mortified and humiliated at the discourteous treatment she receives, and is forced to feel she is but a machine to execute orders at will. Should a physician ever forget that the nurse at his elbow is a **woman** as well as a nurse? How many women among the ranks of nurses might have kept positions of ease and luxury, but have chosen rather to play a more useful part toward the cause of humanity by willingly taking upon themselves the duties of a nurse. Because they have taken that position should they be shown less courtesy than would be shown to a woman of society?

Be she ever so shallow or frivolous, the butterfly of society enjoys the nameless little courtesies that a woman alone can appreciate, while her more worthy professional sisters painfully suf-

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fer the lack, oftentimes, from the very same source. Is the society woman who dances lightly through the midnight hours more deserving of courtesy than the faithful watcher by the stricken bedside? No! emphatically answers the nurse, and, thanks be, many physicians with her; but there are many yet who might well question themselves upon the subject, and experiment as to the results of their attitude toward the nurse. If the nurse keeps the dignity of her profession, she can demand as much respect as the highest "lady of the land," for is she not as worthy? She may be so thoroughly trained that she can keep her silence through any ordeal, but she feels, as any true woman must feel, the lack of courtesy, and appreciates, as only true women can, the attitude of the gentleman in the physician.

ELEANOR M. TUCKER.

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REPUTABLE MANUFACTURING PHARMACISTS DO NOT FUR- NISH EMMENAGOGUES FOR IMMORAL PURPOSES.

Recently one of the leading manufacturing pharmaceutical houses received a letter upon the letterhead of a retail druggist, but signed by another name followed by the word "druggist." The person signing the letter may have been a clerk or successor of the druggist. The letter was as follows:

"There is practically no sale for your Emmenagogue Improved Pills, as few ladies know anything about them, and we can give no advice, as we know nothing about them ourselves as to dose, etc. Please let us know by return mail and tell us how to use, dose, etc."

Reply was made to the pharmacist whose name was on the letterhead, and was as follows:

"We have our doubts about Mr. — being a druggist, for we cannot imagine any druggist not knowing that it is not only immoral, but criminal, to sell an emmenagogue except upon a physician's prescription. We believe that every druggist who sells an emmenagogue direct to the consumer is put upon his notice that it will be used for an immoral and criminal purpose. Emmenagogues on our list are intended exclusively for the prescription trade and we never knowingly sell them for popular use or to be recommended and re-

sold as remedies for female complaints, etc."

EMPIRIC OBSERVATIONS.

By W. Leming, M.D., Tucumcari, N. M.
Personally I have observed aconite quiet nervous excitement with vasomotor disturbances, given early. Also quiet excitement from cocaine.

W. O. HENRY, M.D.

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Berberis Aquafol. for chronic skin diseases with tissue fullness, digestive disturbances.

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Iris versicolor is the remedy for sick headache with sluggish liver. Comp. Tr. Capsicum and Myrrh is an ideal stimulant where the patient wants to faint or capillary circulation is poor. Fine before use of cocaine. Podophyllin in 1-100 gr. doses t. i. d. cures morning diarrhoea with single, fetid stool.

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DIET AND THE PROLONGATION OF LIFE.

By John C. Warbrick, M.D., Chicago.

Fads have always existed and after one dies out another one is continued. The subject of diet is discussed a great deal in relation to one's health and also the means to prolong life to a good age. Opinions are varied as to the proper dietary. The ordinary diet has been found to be very useful for a great many who have reached a great age. No special regimen necessary to reach a good old age. At the present time a great many different methods are advised as a means of reaching a great age, but none of them can be depended upon as being reliable except in some instances possibly. The constitutions of some individuals prevent them from reaching a great age, while others seem destined to reach a high index figure. From youth to old age too much food is taken for the body requirements as proved by finding out the amount of urinary chlorides. Eating large amounts of food and more than the system requires is not good but injurious. In many countries where the habits and diets of people are different fine specimens of manhood may be found, while many of the people reach a great age by simple living. The great majority of

people pay no attention to the fact of prolonging life to a good age by special means. Worry may keep a good many from reaching an old age as peace of mind is necessary for the bodily welfare. Report of a number of cases where a great age has been reached by the ordinary means of living.

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WHAT FOOLS THESE MORTALS BE.

BY H. O. HYATT, M.D., KINGSTON, N. C.

Once when we were young we had a spirited controversy with a policeman who was getting ready to fire at a proud bitch who was in the street accompanied by a numerous train of male attendants. I plead for the life of the female dog, basing my argument upon what I at that time considered natural justice. The lady dog's condition was physiologic, and could not be controlled by a due sense of modesty. The congestion of the external genitals was a signal of ripened ova within her ovaries. Nature had prepared her to fecundate. Her conduct could not in itself be offensive to the most fastidious moralist. Her troop of male attendants were not following because

of her beck and call, but because of their own desire. It was a male dog tournament at which each was struggling to be the successful knight. Their snaps and snarls at each other showed a lack of neighborly regard when nature calls.

In spite of my pleading the policeman fired the fatal shot. He said the law required it. The societies for the prevention of cruelties to animals, and the Anti-vivisectionists ought to get busy and start a crusade in behalf of passion-ridden female dogs. Maybe they could devise some wiser and juster means of dealing with the problem than humanity ever has dealt with the sexual question in man.

If it were not for the serious manner of the crusaders against vice, their propaganda might be considered humorous. Their methods are as ludicrous as Don Quixote's charge on the windmills. A very little physiologic knowledge and a very little law would be all that is

Foot Note—We have tried to present the "sex question" in its various phases, in the limited space we could devote to that purpose. It is a large question, not likely to be solved altogether in a single generation. The present article is given space because it is "different." We might add our conviction that anyone, male or female, who transmits a venereal infection, should be incarcerated until cured.—Editor.

needed to place the problem where its solution and adjustment could be safely left to social convention.

A plain statement of the physiologic fact that it is friction on the endings of the sensory nerves that produces the pleasure attending the sexual act and that the climax is simply a very pleasurable reflex, would dispel the universal idea, that a man was getting something good from a woman when he cohabited with her. The sensation is individual, not depending upon a reciprocal sensation in the other party to the act. The exciting cause is friction. Friction with anything will produce the reflex. The intensity of sexual pleasure is due to the physical and mental condition of the participant. Instead of getting something, he simply performs the sexual act, simply that and nothing more. Unlike the acts of urination and defraction, its performance is not a physical necessity. The health of no animal is jeopardized by the non-performance of the sexual act. Among young and healthy animals, when passionate turgescence becomes very great, the sexual function becomes self-performing. Slight irritations upon the congested surfaces will produce the organismal reflex during the dream state of sleep.

The prevalent idea among males that copulation is getting something, and that the nicer, cleaner and handsomer the female may be the better the something got, becomes very largely responsible for male incontinence.

The idea of getting something which seems inground in the male mind is no doubt responsible for the female's idea of having something to give away or sell, an asset of money value. The female idea of having something of money value is not confined to those women who sell sexual service for a price, but is shared by a large number who marry. This class believe that they are fulfilling their share of the marital contract when they supply their

husbands' sexual wants. Women of this type, and there are many of them, need as much reforming as the denizens of the red-light sections. The red-light women sell to the general public, while the other party who makes a profession of her sex sells to the private dealer.

Submitting copulation to scientific analysis we find that both participants get their pleasure out of their own individual bodies, and their own individual reflexes. If there is any service rendered one party renders as much service as the other, with all obligations discharged. This being true, the party who pays for the service is a fool and the party receiving pay commits a fraud and a theft.

Frauds and thefts are punishable by fine and imprisonment. A law punishing any woman, who demands or receives pay for a sexual service, with a term in prison will effectually put an end to prostitution.

To stop at legislation against sexual service for pay would be little better than the law requiring the killing of proud bitches when found upon the public highway. The transmission of gonorrhea and syphilis is probably the very worst scourge of the human family. Women do not infect each other. They are always infected by men. Few have gonorrhea or syphilis without knowing it. Any brute of a man who may choose to infect a woman can do so with impunity. In fact many who buy sexual service feel that they have a perfect right to infect any woman who may choose to serve them for the pay she gets.

A law giving a woman who has been infected a minimum damage of a thousand dollars and as much more as the jury allows, would go a great ways in producing continence among males, save thousands of women from the surgeon's table and render blind infants fewer in number.

Any effort to reduce venereal infection that does not bear hard on the male is not only useless, but absolutely

silly. Women rarely get so low in moral tone that they will knowingly transmit a venereal disease. While silly men tell each other of their cases, a woman dreads the reputation of having "the bad disorder" worse than anything.

Lord Byron said the virtue of women depends upon the virtue of men. He

simply stated a fact which ought to be patent to everyone. Any attempt at the moral uplift of one party to an illicit act coupled with a recognition of the privilege of the other party to the same act, is the rankest kind of an absurdity. Make the men square and honorable in their sexual dealing and the women will have to be.

SOME SANITARY ASPECTS OF THE MEXICAN REVOLUTION.

BY DR. HOWARD D. KING, NEW ORLEANS, LA.

The deplorable sanitary condition of the Mexican troops, Federals and Rebels, is just now exciting the same attention as that which our own army did sixteen years ago. Disease, poor field shelter, badly constructed barracks, ill-assorted and insufficient rations, overburdening soldiers, a majority of whom are mere youths, before their frames are fully formed and able to withstand the effects of the weight and pressure of their kits and accoutrements, together with the exertions to which they are subjected by forced marches, through mountainous country, while carrying them, are mentioned as the chief factors in a rapidly increasing mortality in Mexico.

The prevalence of epidemic smallpox amongst troops and refugees on the Mexican border does not represent more than a moiety of the actual evil existing in the interior. Every day, the possibility becomes greater of a widespread epidemic of some disease. It is now a serious question, which must be fully weighed by those who are occupied in the prevention of disease importation from Mexico what measures must be taken to protect the United States. With the embargo on arms lifted communication with Mexico will be more frequent, and, thus, the chances of disease introduction into this country are proportionately increased. And unless there shall be some effective exercise of sanitary power along the

whole Mexican border, there can be no escape from the criticism, that the United States was content to maintain a breeding ground for disease, and sanctioned its dissemination throughout the whole country.

Not only must protective measures against smallpox be invoked, but active steps should also be taken to prevent the introduction into the United States of typhus, typhoid and yellow fevers, cholera and plague, of which there are grave possibilities. On the north from San Diego, California, to El Paso, Texas; and on the east from Las Cruces, New Mexico, to Brownsville, Texas, there should be established a series of quarantine stations for the detention and observation of refugees from Mexico.

Every individual ailing from Mexico should be regarded as potentially pathogenic; and it is essential that measures be employed to render the refugee harmless from a disease viewpoint. Vaccination against smallpox and typhoid should be general; examinations for cholera vibrio should be conducted with thoroughness; clothes and personal effects should be well fumigated, in order to minimize the chances of a typhus outbreak; and, detention should be for a period sufficiently long to obviate any eruption of yellow fever.

Of course, such protective measures will be expensive—but disease importation must be prevented at all costs.

Now, that the Panama Canal is practically completed, a portion of the sanitary forces of the Canal Zone could be

profitably employed along the Mexican border in the maintenance of a strict sanitary cordon.

THE DIFFICULTY IN DIAGNOSTICATING TUBERCULAR MENINGITIS FROM GASTRO-INTESTINAL DISEASES.

BY ROBERT GOODMAN, M.D., PHILADELPHIA, PA.; ASSISTANT IN THE PEDIATRIC DISPENSARY OF THE MEDICO-CHIRURGICAL HOSPITAL; CLINICAL ASSISTANT IN ORTHOPEDIC SURGERY, POLYCLINIC HOSPITAL; PEDIATRIST, SOUTHERN DISPENSARY, PHILADELPHIA, PA.

Many diseases of infancy have cerebral symptoms. When a parent has tuberculosis the child usually has some form. Tubercular meningitis is often preceded by some lung condition, and the onset is usually gradual. The child becomes anaemic, fretful, and has long sleeping periods. Vomiting, piercing crying spells (often shrieking in its sleep) and grinding of the teeth resemble the symptoms of worms. Black stools and green vomiting are two seldom mentioned symptoms. Constipation is usually present.

Loss of weight, increased reflexes, retraction of the head, convulsions and

nystagmus appear later. The abdomen is retracted; Kernig's sign and tache-cerebrale can be demonstrated. The respiration when sleeping is like the first half of a Cheyne-Stokes—a slowly increased depth of breathing followed by a sigh and a pause. The Von Pirquet is corroboratory. The temperature is about 101° , the pulse rapid.

Later the pupils dilate and react sluggishly. The child becomes comatose and markedly emaciated. The fluid from a lumbar puncture is under pressure and contains flocculi and tubercle bacilli. The disease lasts about four or five weeks.

221 Fitzwal Street, Philadelphia.

THE PULMOTOR IN ASPHYXIA NEONATORUM.

BY C. C. STEUFFER, M.D., HARRISBURG, PA.

With the invention of the pulmotor a new method of treatment for asphyxia has been introduced. Its usefulness in the treatment of asphyxia by various gases, in the adult, is demonstrated daily in our larger cities and the mortality from these several causes is materially reduced.

The pulmotor is an instrument operated by the pressure of oxygen in an oxygen tank. It may be attached to any tank or the small one, with the instrument, may be used. The instrument operates in such a way that it not only pumps pure oxygen (or a mixture of oxygen and air if desired) into the lungs but, most important, also sucks it out again. The instrument is so de-

signed and is so mechanically perfect that a corpse can be made to breathe mechanically.

July 26, 1913, Dr. R. L. Perkins of Harrisburg, called the writer in to see a case in labor. The woman, a primipara, had been in active labor for about thirty hours. The pelvis was small and the child's head large. The labor was completed with forceps in about an hour.

There was no sign of life in the newborn child except a faint fluttering of the heart. Dr. Perkins and the writer practiced all the different methods usually employed to encourage respiration without apparent benefit. We decided to try the pulmotor as a last resort, neither of us expecting the child

to live. We sent to the office of the Harrisburg Gas Co. for their pulmotor, the only one in the city at that time, and began its use immediately upon its delivery at the house. The child was forced to breathe, inhale and exhale, pure oxygen, and in a comparatively short time shallow, regular breathing started. Then a mixture of oxygen and air was used for ten or fifteen minutes, the child's general condition improving

slowly under this treatment.

The child did not cry for $2\frac{1}{2}$ or 3 hours after birth, but the following day seemed perfectly normal and cried lustily.

At this writing, almost three months later, the child is apparently normal in every respect.

This I believe was the first case on record where the pulmotor was used successfully in asphyxia neonatorum.

THE MEDICO-ECONOMIC MOVEMENT IN GREATER NEW YORK.

BY OSCAR ROTTER, M.D., NEW YORK.

Most physicians in New York City of late years are just earning a bare livelihood. The main causes are: A gigantic abuse of medical charity by patients able to pay; a Board of Health not only attending to public sanitation, but actually practicing medicine through wide-open dispensaries of its own; cheap medical service by sickness insurance companies; unremunerative lodge practice, etc. Dispensaries and Boards of Health practically ignore the Dispensary Law, prohibiting medical charity to persons of means. With innumerable dispensaries trying to out-rival each other in attracting patients, and a vast population thus being systematically led into habits of "pauperism," conditions are bound to get

worse for physicians unless radical reforms be effected by themselves. The scientific medical societies have proved indifferent, incompetent, or both, to deal with medical economics. However, the necessity of co-operation for economic protection has been realized at last by physicians at large. The result was the organization of Territorial Physicians' Economic League and their federation, into a central body, composed of delegates: "The Associated Physicians' Economic League of New York." This was followed by the foundation in August, 1913, of a monthly journal, "The Medical Economist," published at 71 West 23rd St., New York City. Subscription \$1.00 a year.

THE SYMPTOMS OF THE PATHOLOGICAL LINGUAL TONSIL AND ITS TREATMENT.

BY HAROLD HAYS, A.M., M.D., NEW YORK CITY.

Among the most important symptoms resulting from the enlarged lingual tonsil are chronic rasping cough, a feeling of a foreign body in the throat, a tickling sensation in the throat, impaired respiration and a tendence toward nausea, particularly in the morning. Often patients are told that these symptoms are due to some nasal condition, resulting in the coughing up

of much mucus. It is possible that such conditions may be the beginning of the hypertrophy of the lingual tonsil. It is therefore unwise to promise a cure by its removal.

The only cure is by operation, except in old patients. The simplest way to remove the lingual tonsil is by the Myles' lingual tonsillotome after thorough cocainization.

As hacking cough is most often caused by throat conditions and as many patients are not relieved by the usual procedures, it is wise for the general practitioner particularly to realize that the lingual tonsil may not be accountable for all the trouble. Investigation of this mass of tissue should

be particularly sought for in that class of cases where the patient has a "lumpy" feeling in the throat, and where the cough persists for a great length of time. The operation for the removal of the lingual tonsil is very simple and the results are exceedingly gratifying. 11 West Eighty-first St.

THE MANAGEMENT OF THROAT AND NOSE PATIENTS FOR PROPHYLACTIC AND THERAPEUTIC MEASURES IN OTHER DISEASES.

BY L. C. INGRAM, RED WING, MINN.

Special surgery of the nose and throat has been so perfected of recent years that we can now promise to the patients as permanent relief and results as can be promised by anything in general surgery. Submucous resection of the septum and conservative treatment of hypertrophied turbinates by crushing, possibly heads the list. It removes obstructions, promotes drainage and natural function by conserving functioning tissue. It is a prophylactic to sinus complications or retrobulbar neuritis if performed early enough, and if these complications already exist and have occurred as they generally do from the obstruction, it is the first step in the treatment, if the acuteness does not call for more radical interference at once.

Tonsillectomy and adenectomy are other measures of this special surgery that by a more perfect technique, we are able to relieve many heart complications, rheumatism, and general dis-easias and avoid the complications that oftentimes happened from an incomplete removal of the tonsils or injury to the pillars. In removing the small buried diseased tonsils we are able oftentimes to clear up systemic infections that seemed very puzzling indeed. Every child with an otitis media should be examined for adenoids and their removal generally cures.

I am partial to the LaForce adenotome for the removal of adenoids. It leaves a clear-cut surface and no ragged strings as is often the case with the curette.

RELATION OF THE ACCESSORY NASAL SINUSES TO ONE ANOTHER—PLATES O TO VIII.*

BY J. W. MURPHY, M.D., CINCINNATI, O.

Each of the accessory nasal sinuses has a special function to perform, and any disease of the nasal cavities is almost sure to finally find its way into these accessory cavities. Once the disease becomes established in an accessory sinus, its treatment and ultimate cure becomes much more difficult. It is therefore of the utmost importance that the nasal cavities be put in a nor-

mal, healthy condition on the theory that an ounce of prevention is better than a pound of cure. The normal relation of the opening of each accessory sinus is well shown in the following cuts, and this picture should be kept in the mind of anyone treating these cavities, that the beginning of a disease in any of these accessory sinuses may be early recognized. 4 West Seventh St.

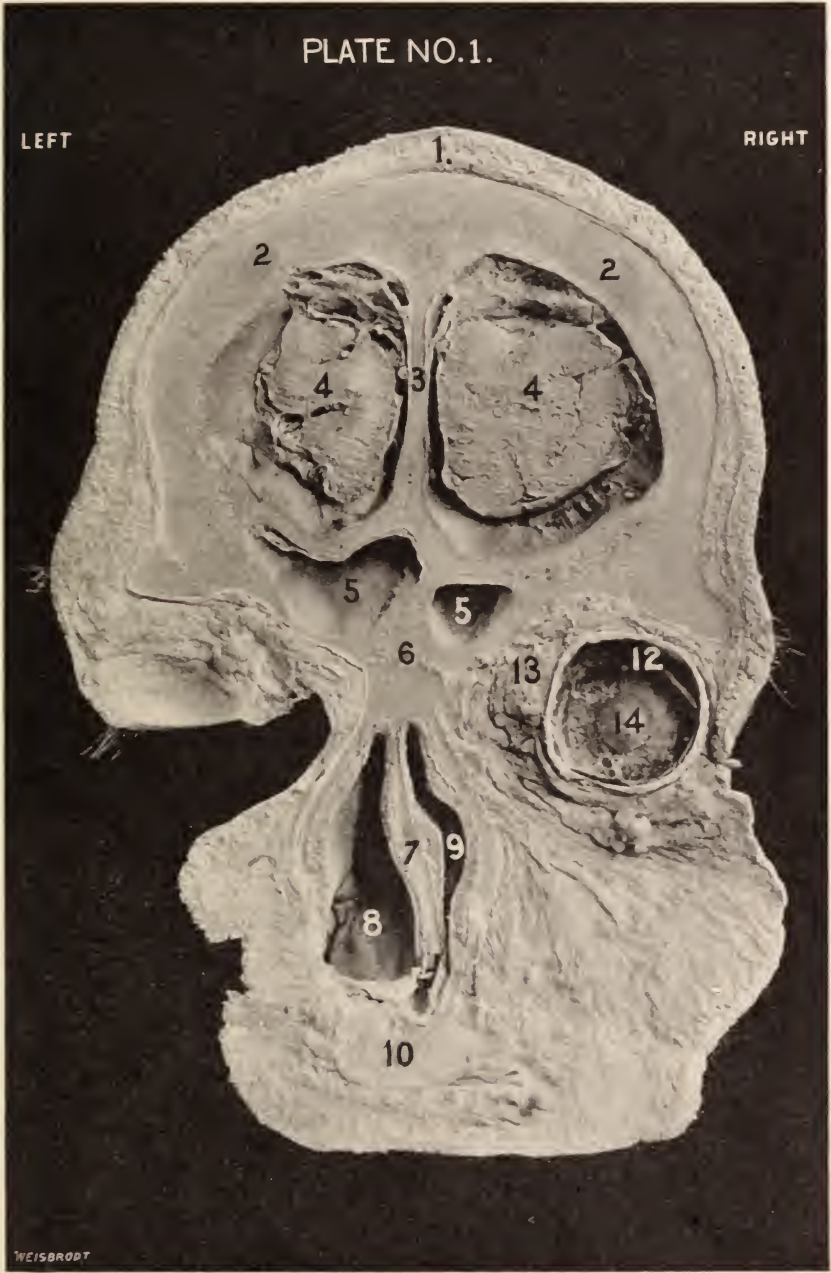
*A more complete paper by Dr. Murphy appeared in the West Virginia Medical Journal.

PLATE NO. O.





PLATE NO.1.



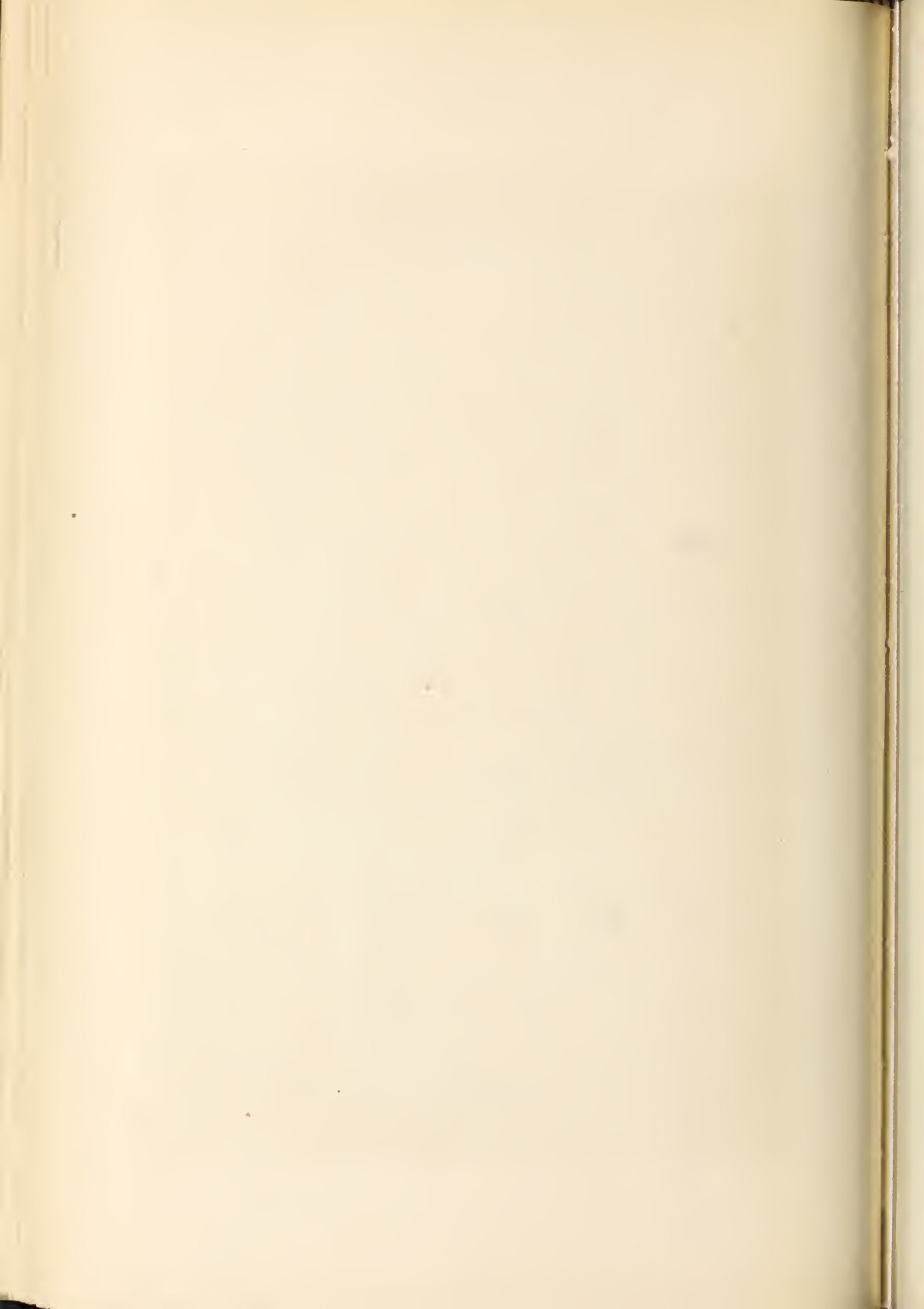
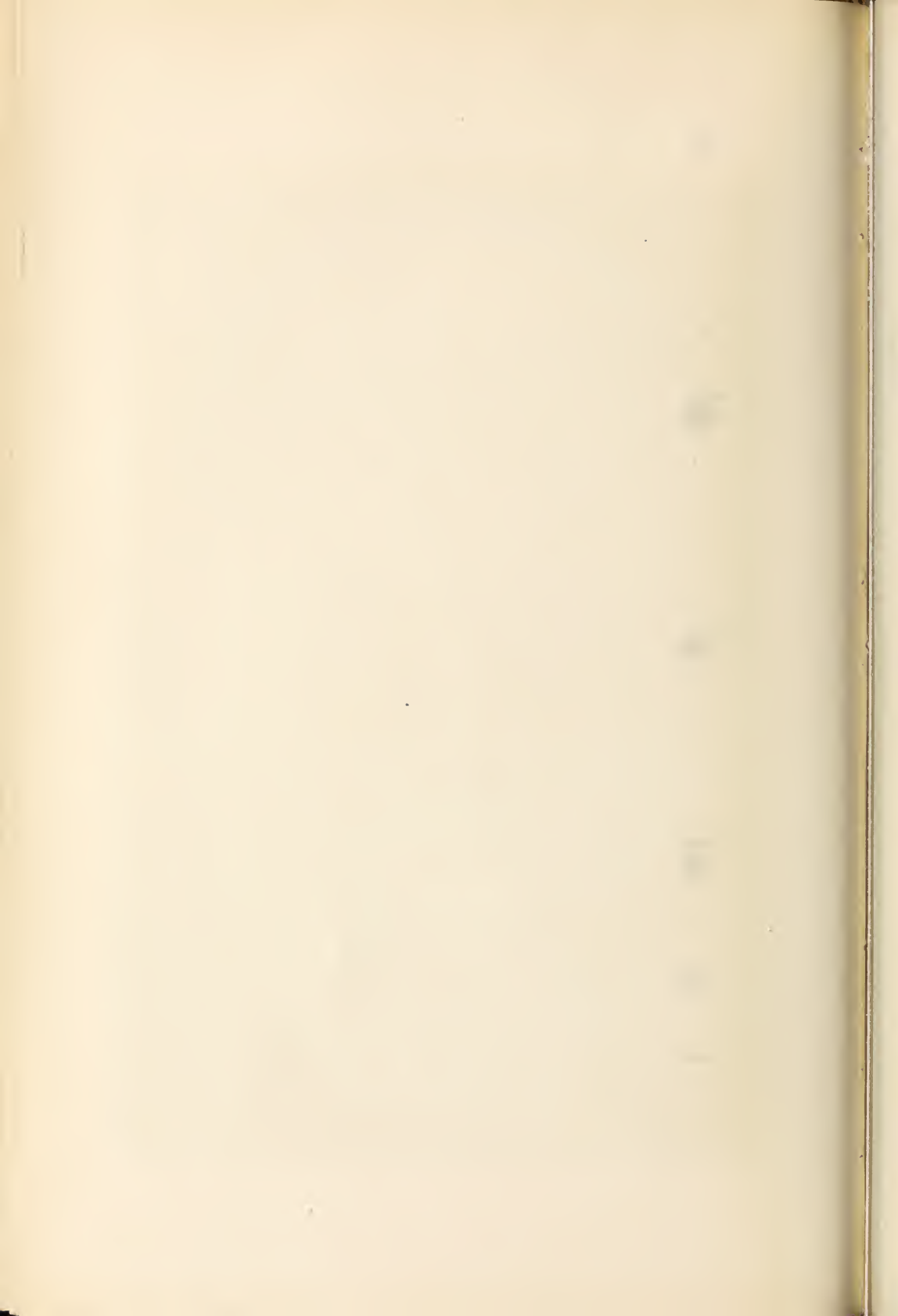


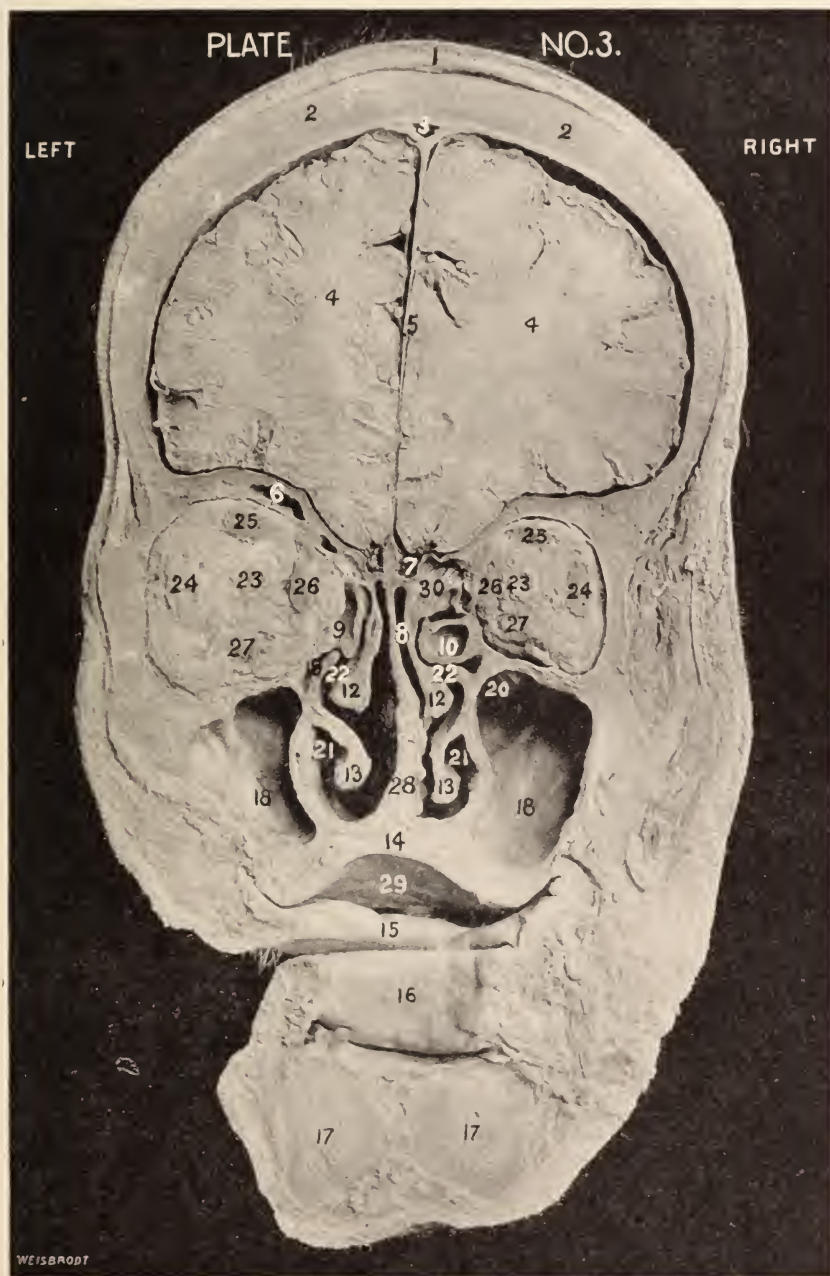
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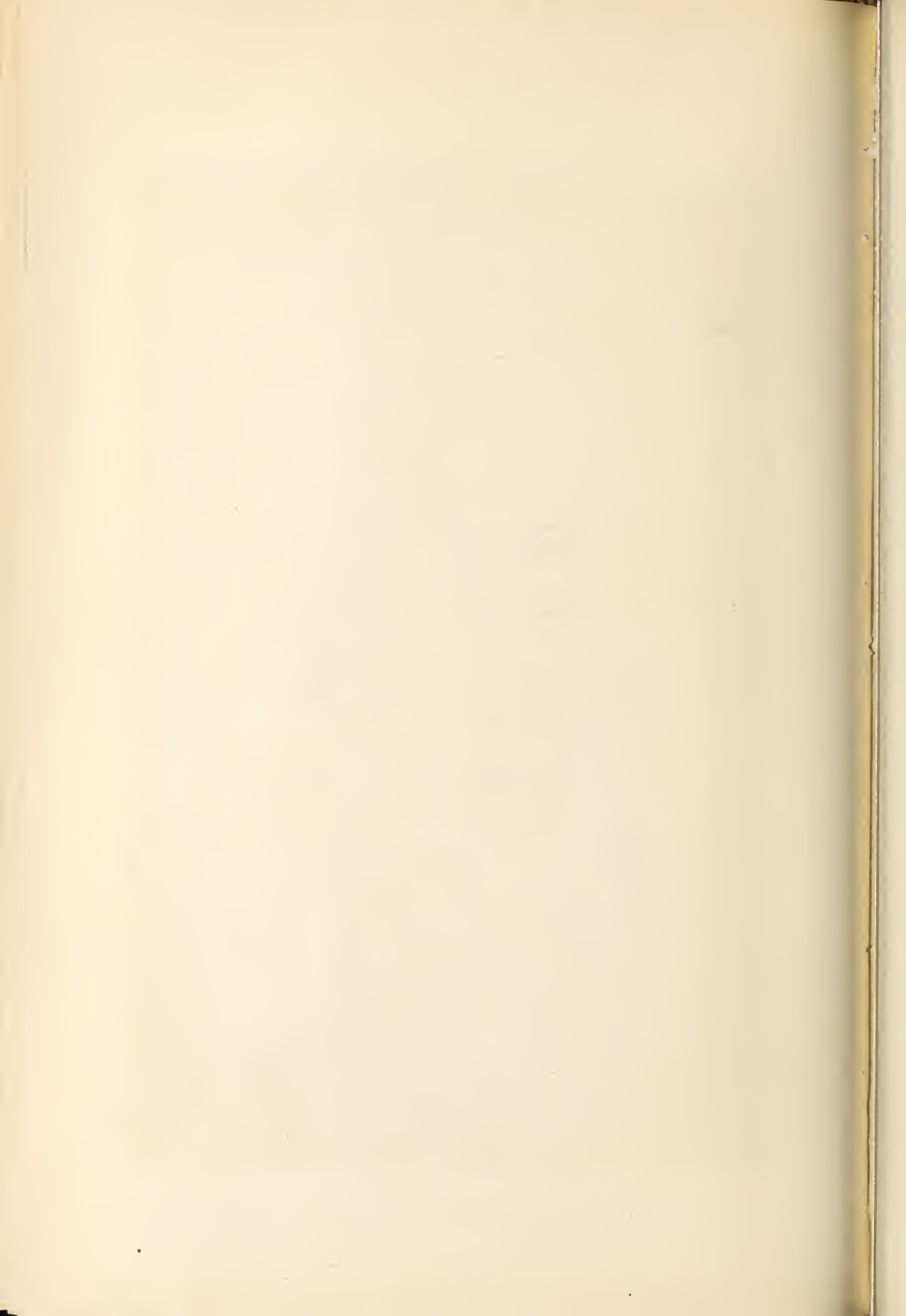
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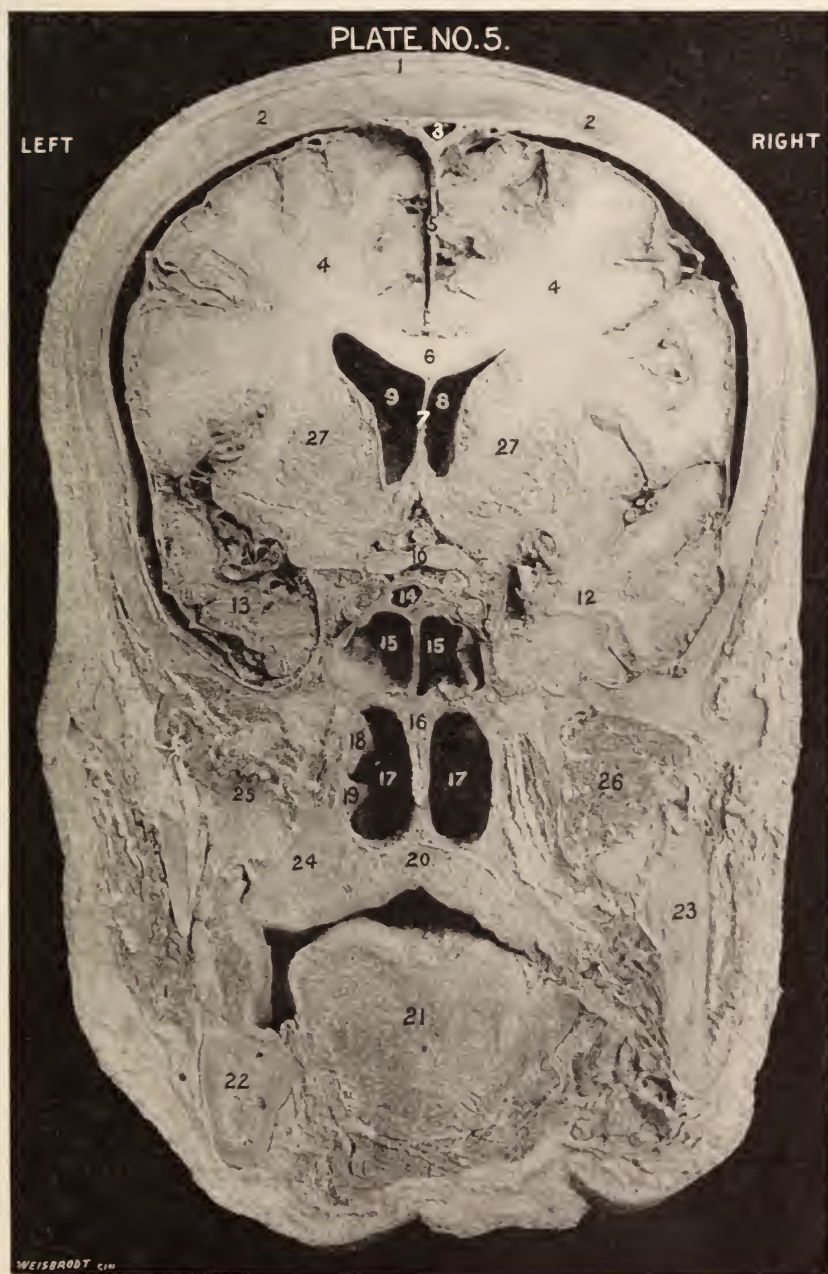












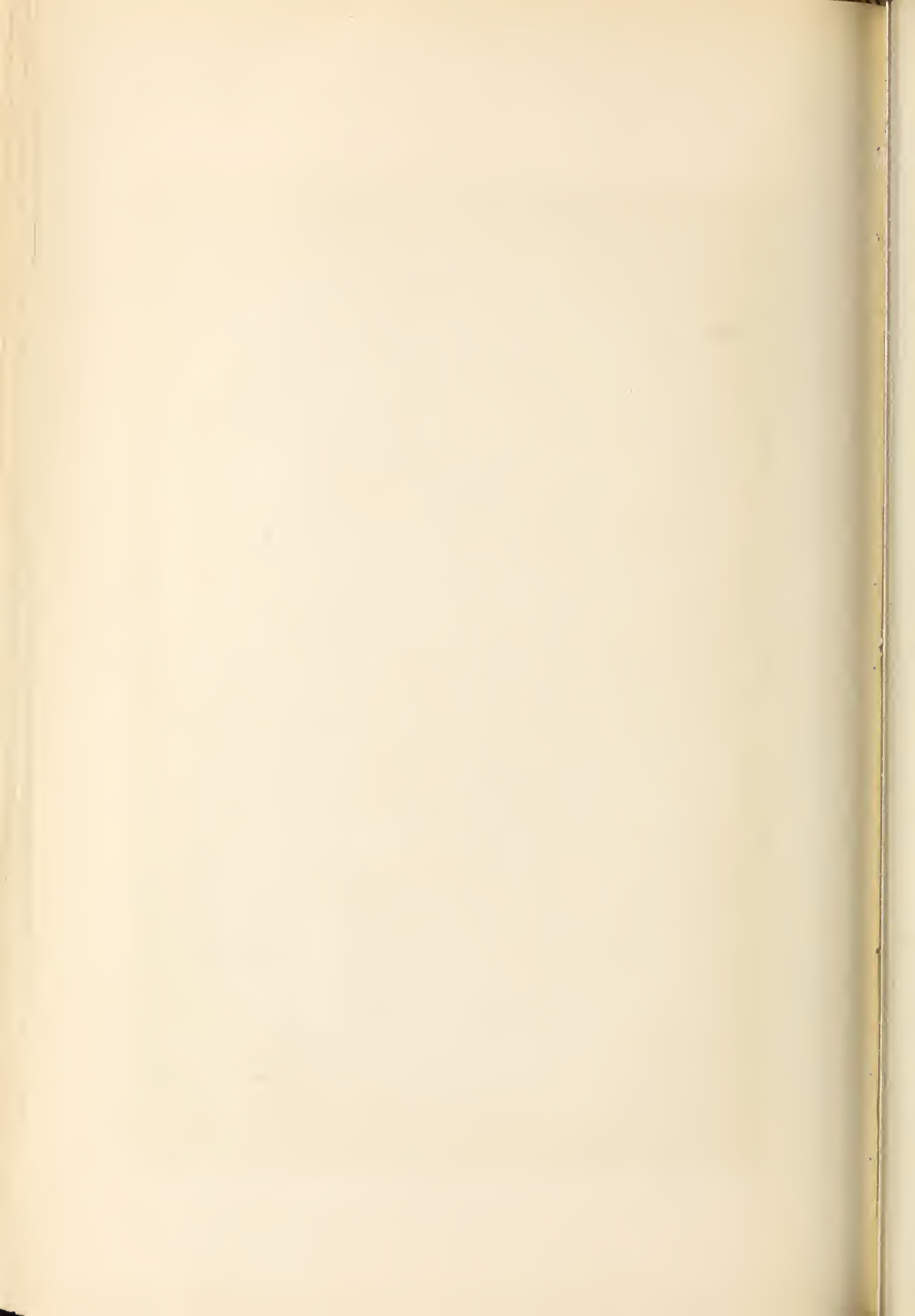
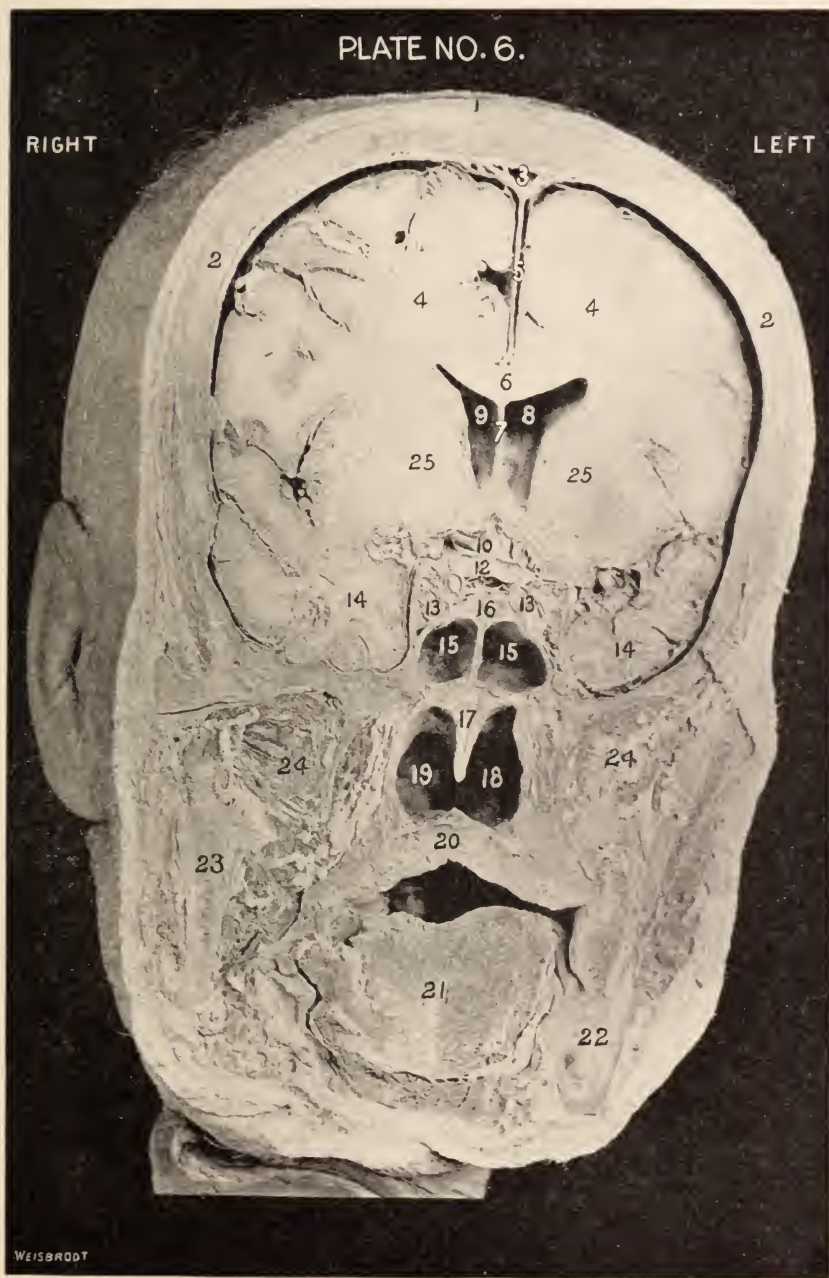
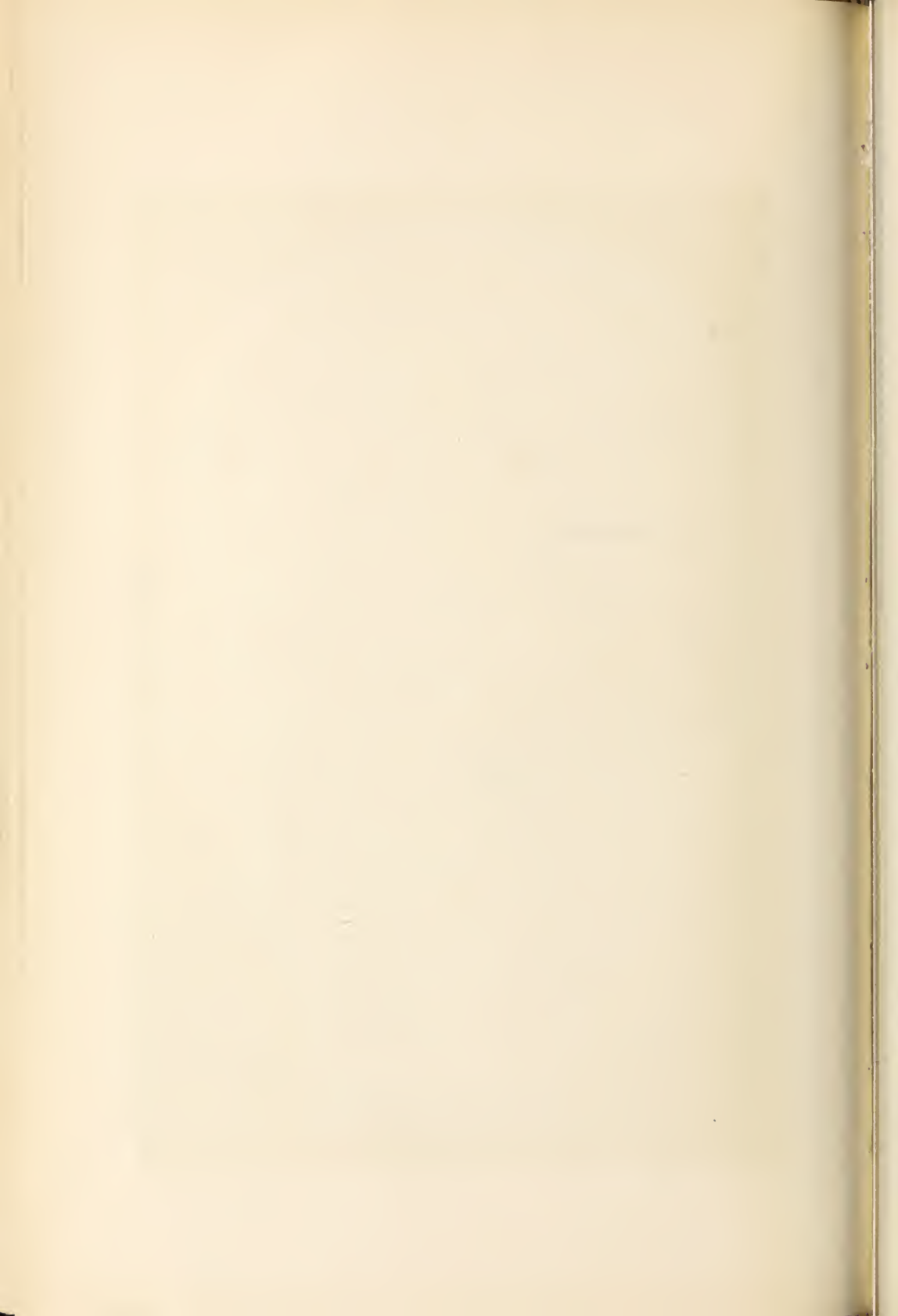


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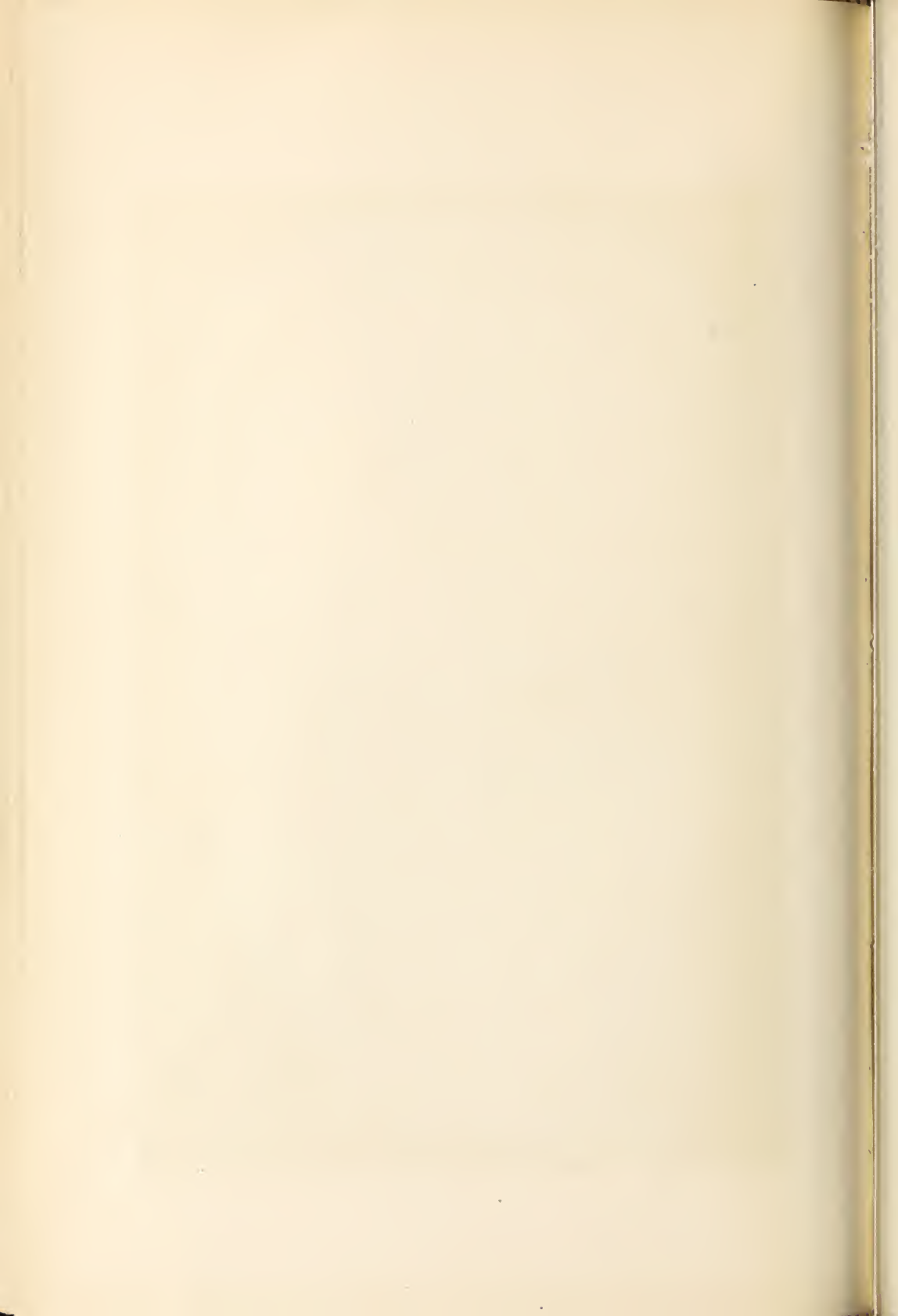
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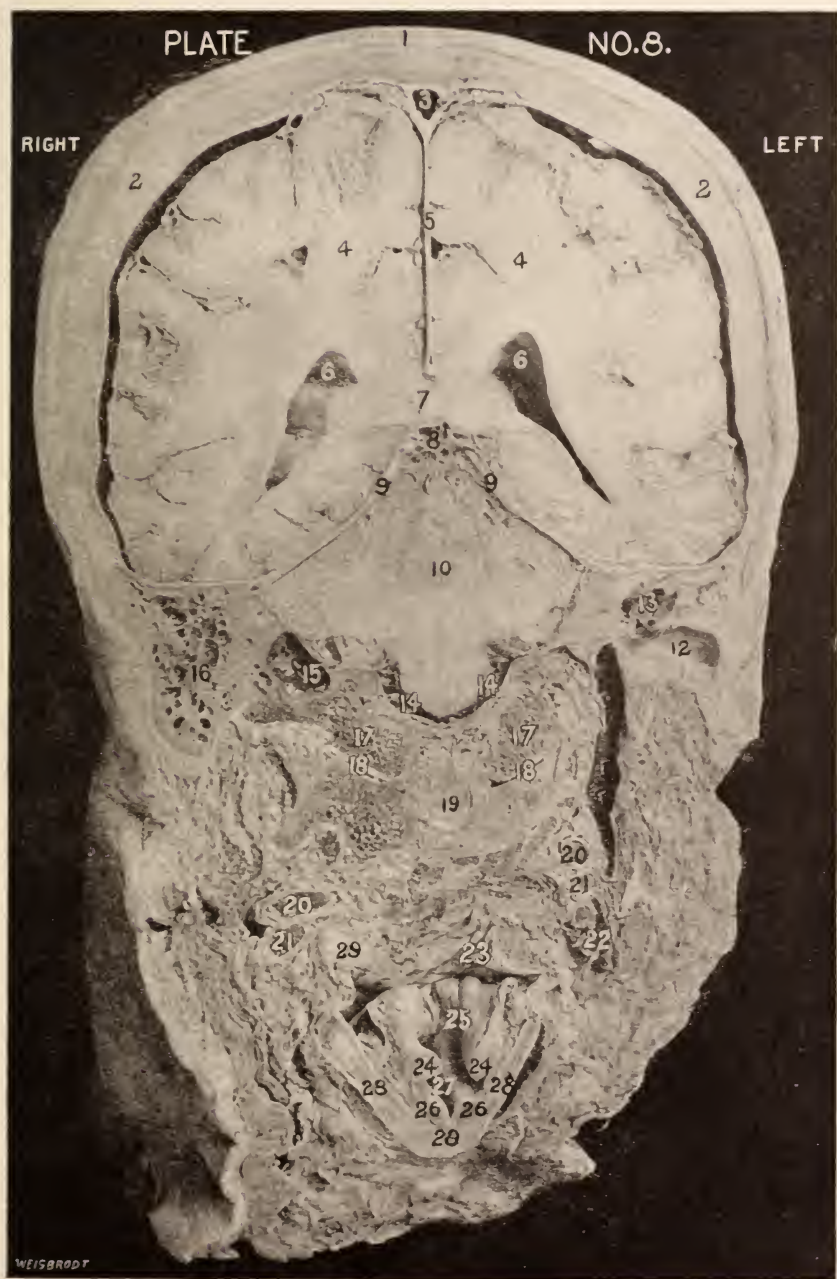
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SOUTHERN CALIFORNIA PRACTITIONER

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EDITORIAL

SALVARSAN DEATHS.

Superintendent Whitman's Report.

Los Angeles, March 11, 1914.

Honorable Board of Supervisors,

Hall of Records, City.

Gentlemen:—

I herewith submit to your body a report covering, as near as is possible for me to do, all of the circumstances and particulars appertaining to the fatalities which occurred at the County Hospital following the administration of salvarsanized serum to eight patients, all of whom were suffering from the effects of syphilis in advanced stages of the disease. In some, there was disease of the bones; others were in advanced stages of locomotor ataxia, in which portions of the spinal cord were degenerated. The Wassermann test, which is considered reliable, was made in each and every case; in addition a cell count of the cerebro-spinal fluid and the butyric acid test were made, all corroborating the clinical diagnosis of syphilis.

Hence there can be no question as to the nature of the disease from which these patients suffered. The diagnosis having been confirmed, the question of treatment was a matter of selection. Well knowing that the older forms of treatment had proven ineffective in syphilitic cases, where the spinal cord was involved, and neosalvarsan, which has been regarded as a specific in the earlier stages, had proven ineffective when administered by the blood or into muscular tissue, another recognized mode of procedure was adopted, viz., the intra-spinal administration of salvarsanized serum, the technique of which is somewhat complicated, but it is exact, i. e., the quantity given to each person is definitely known, and according to reports from medical authorities, is more effective than when given in any other way.

In this connection I desire to state to your honorable body that the Los Angeles County Hospital, instead of being an experimental station, as might be inferred from some published ac-

counts concerning this unfortunate affair, is in fact, although progressive, one of the most conservative of its kind, as is evidenced by the fact that the intra-spinal method of using salvarsanized serum had been in use for at least a year in many medical centers throughout the country before being used in this institution, and medical reports seem to indicate that this method is becoming the method of choice by many physicians in the treatment of spinal syphilis. It follows therefore that the treatment here used was no experiment, and I desire at this time to emphasize the fact that no experimental treatment upon human beings has been conducted in this institution since my incumbency, nor will any be tolerated.

On the seventh of the present month, after consultation with several physicians, all members of the attending staff, Dr. A. T. Charlton directed the administration of salvarsanized serum to eight patients in the County Hospital, the serum having been prepared by himself according to authority. As all accounts so far published in the local press concerning the preparation and administration of this remedy to these patients are more or less inaccurate, I submit herewith attached in detail, Dr. Charlton's statement concerning the technique followed by him throughout the whole procedure.

Statement of Dr. Charlton.

"On Friday, the sixth instant, between nine and eleven A.M., I withdrew about 15 c.c. of blood from the veins of the arms of eight patients, and from two others about 6 c.c. of blood only was obtained. The amount of blood received from the two latter patients furnishing an insufficient quantity of serum for the spinal treatment, I decided to make a dilution which would include eight spinals and two intravenous treatments, and this was done. Two ampules were used for this

dilution. On account of the lapse of time the intravenous was not used.

"The blood was taken through sterile pipette placed in sterile centrifuge tubes and the serum separated from the fibrin and red cells. The serum which was perfectly clear, was pipetted off to the amount of 5 c.c. and this was placed in a sterile glass stopper bottle; to this was added one, two or three milligrams of freshly dissolved neosalvarsan in sterile normal salt solution. Following this there was added to the preparation 8 c.c. of sterile normal salt solution, using a sterile graduated all glass syringe. This procedure was carried out absolutely with the serums from each of the eight patients separately. The preparations were then all placed in a water bath at a temperature of 54C for one-half hour. They were then placed in a refrigerator for twenty hours, each bottle labeled with patient's name and dosage for each.

Technique of Administration.

"Under the usual aseptic conditions from three to seven c. c. of spinal fluid was drawn from each patient. Then from each individual bottle there was taken the diluted salvarsanized serum, using a sterile graduated glass syringe, and with this syringe the contents was introduced through the same needle by which the spinal fluid was withdrawn."

I desire to state further that from the time my attention was called to these cases until the present, I have left nothing undone that would shed light upon the cause of this tragedy.

I personally drove to Pasadena and got the Coroner, and at his request, went for the County Autopsy Surgeon. I also called in consultation a half a dozen or more prominent members of the profession, whose knowledge and advice I thought might be of service to us in this emergency.

I personally phoned to all of the morning newspapers, giving them the first information they had of the affair,

and I have practically placed myself and the records of the Hospital at the disposal of the public through the press and county officials ever since.

As to the embalming of these bodies prior to autopsy, I will state that this was not done at the County Hospital, nor by anyone connected with the Hospital, but was done without our knowledge after the Coroner had removed the bodies from the Hospital.

It is only fair to the Coroner to state that to my personal knowledge he was advised by six or more physicians that an autopsy would not reveal any characteristic lesions that would account for the deaths, and this opinion was substantiated by the autopsy. However, the autopsy was justified, since it revealed syphilitic lesions in the lung, liver and spinal cord in a patient who had denied having syphilis, thus corroborating the clinical and laboratory diagnosis and justifying the anti-syphilitic treatment.

The most plausible explanation of the cause of death in these cases is that oxidation had taken place in the neosalvarsan. This could have occurred through some defect in the glass container that was not apparent at the time the preparation was used.

In conclusion I desire to express our appreciation of the treatment accorded our County Hospital by the great mass of the public and the press in this unfortunate affair, and I can only repeat that there is nowhere more sorrow concerning this unfortunate outcome of what was intended to be for the best health interests of the deceased patients than there is among the house and attending staffs of the Los Angeles County Hospital.

Very truly yours,

C. H. WHITMAN,

Supt.

APPROACHING MEETINGS.

The State Society meets at the Hotel Potter, Santa Barbara, April 14-15-16,

this year. Do your part to make it the biggest and best meeting of our State Society. Make it a point to attend and take some part in the meeting. You will then feel a just sense of pride in what promises to be the busiest and most important meeting of our state organization. The President, Dr. F. C. E. Mattison, is bending every energy to make this meeting a milestone in the memory of the present generation. Let's help him.

The Southern California Medical Society meets at Riverside, May 6-7, in the Mission Inn. Dr. William W. Roblee of Riverside is President, and Dr. Walter Brem, Brockman Building, Los Angeles, is Secretary. Such a team of executive officers, with such a delightful meeting place, bespeak a good meeting. This Society has developed to a size comparable with most state medical societies, and at its sessions creditable scientific work is presented. Every physician in this region ought to feel in loyalty bound to attend the sessions of this Society and take some part in its proceedings.

Make your reservations at once for these two important meetings. These professional gatherings afford opportunities to meet our fellows scientifically and socially, in debate and association, to the betterment of ourselves and our calling.

STATE JOURNAL INCONSISTENCIES.

No, we will not take time to mention all of them. But we note in the February issue of the State Journal, page 85, Atophan is classed among the "Interesting Frauds." Upon turning the page, the same drug is placed first among the advertisements. By the way, where is the Coca-Cola advertisement that formerly appeared in the Jones Journal? Possibly they only ad-

vertise in "our" Journal in the summer time.

Seriously, don't you think it would be more becoming the dignity of our profession if we were to insist upon the elimination of erratic, caustic criticism in the State Journal? The criticisms of the Carnrick preparations, on the page referred to above, are far from scientific in spirit. The entire space, for which the medical men pay, is devoted to clippings from the "Jour. A. M. A.," a publication that readers of the State Journal are supposed to receive. If such clippings were carefully selected, they might be of scientific interest. But a criticism is only as strong as it is reliable, and to include among "interesting frauds" a number of reliable preparations of well-known value in therapeutics, is to weaken the attack upon those nostrums that rightly deserve censure. Moreover, it's wrong.

ILEAL STASIS.

Dr. Rea Smith's somewhat optimistic paper on the surgical treatment of chronic intestinal stasis that appeared in the Southern California Practitioner for January, 1914, along the lines developed by Sir Arbuthnot Lane of London has been followed in the Boston Medical and Surgical Journal, February 12, 1914, by an extensive editorial and a leading article by Drs. Harold W. Baker and Donald V. Baker of Boston. The editorial is very illuminating and closes with the statement that the work of Lane and his collaborators "has now opened the door of hope for many a one who would otherwise have been doomed to chronic invalidism." The Drs. Baker quote Metchnikoff, who first pointed out that the large intestine is the cesspool of the human body. They name four causes of ileal stasis: Chronic appendicitis, an ileal kink, a congenital membrane or an incompetent ileo-coecal valve. They then enter fully into a description of the functions

of the ileo-coecal valve, but state their belief that the most common cause of stasis is chronic appendicitis. They close their paper by saying: "Any patient with symptoms of chronic constipation, autointoxication, suspected kinks or membranes, should have an X-Ray examination. When pathological conditions are found they should be treated medically or surgically. The surgical treatment is indicated where the medical has failed and always where a true lesion is known to exist."

SEX EDUCATION.

Dunno. Some of the so-called popular variety is decidedly more educational than edifying. If by "sex education" is meant the inculcation of a familiarity with social rottenness, it may be well to recall that vice is a monster of such frightful mien that to be hated needs but to be seen, but seen too oft, familiar with her face, we first endure, then pity, then embrace. Something like that. Sort o' dangerous.

TUBERCULOSIS NURSES.

A proposition is before the Council to provide the city of Los Angeles with a force of tuberculosis nurses. Action by that body has been postponed until more than half the year has passed, with the promise that little or nothing will be done. In the meantime we are told by the Health Office that tuberculosis has increased fifty per cent during the past year and is still showing no signs of abatement. Gentlemen of the Council, what are you going to do about it? Do you believe that the people of Los Angeles will be satisfied with your inactive policy, that bids fair to give us an unenviable reputation as a hot-bed of tuberculosis?

Booker Washington urges that the negro be kept in the country, and that whisky and patent medicines be kept away from him. "These three things will help my race."

EDITORIAL NOTES

Dr. Harry G. Watson has taken offices in the Brockman Building.

Automobiles killed 302 persons in the streets of New York City during 1913.

Dr. Milbank Johnson has resumed practice with offices in the Marsh-Strong Building.

Dr. L. Goldschmiedt now has offices at the Hotel Northern, 420 West 2nd street, Los Angeles.

Drs. Charles L. Bennett and W. H. Kiger have established their offices in the Consolidated Realty Building.

Dr. James H. McKellar, a well known Pasadena specialist, has removed his offices to the Fay Building, Los Angeles.

Harry G. Watson, M.D., formerly associated with Max Einhorn, New York, is located in the Brockman Building, Los Angeles.

Dr. Harley Edgar MacDonald has taken offices in the Hollingsworth Building, corner 6th and Hill streets, Los Angeles.

Dr. Norman Bridge, with his usual public spirit, has accepted a position on the directory of the Los Angeles Chamber of Commerce.

Mr. and Mrs. Julian Kutnow of New York City are spending a few weeks in Los Angeles. While they travel the world over, yet we claim them as residents of Southern California.

Philip Mitchell of Edinburgh, in the British Medical Journal, says that researches carried on by him show that 9 per cent of young children with tuberculous neck glands were infected with bovine bacillus. He urges wholesale sterilization of milk.

Dr. Arthur Stanley Granger and Miss Sara Nelson were married at the residence of the bride's parents, Los Angeles, Tuesday, February 24th. Dr. and

Mrs. Granger will be at home to their friends at Chamouny Apartments, 11th and Grand View, after April first.

Dr. J. W. Cline, recently of Tacoma, Wash., is constructing a fine office, at the corner of Heliotrope Drive and Melrose avenue, where he expects to make his future location. Dr. Cline has been practicing in Tacoma for the past seven years, where he has given his attention very largely to surgery; but was obliged to move to Southern California for climatic reasons, for his family.

AN A-1 LOCATION FOR DENTIST.

In one of best suburban districts of Los Angeles, where I am just constructing a first-class office building, on corner, consisting of seven rooms: Four reserved for my own use, and three arranged for dentist; waiting room in common. Rent will be \$37.50 per month, including services of office girl; telephones, gas, electricity, water, etc. Twenty-five minutes' car ride from center of city. A fine opportunity for new location. Address Dr. J. W. Cline, 4354 Melrose Ave., Los Angeles. (References required.)

Dr. Philip King Brown has founded a self-supporting tuberculosis sanatorium for the poor at Arequipa, California, for the tuberculous poor. Dr. Brown has imported from England an expert potter and with his aid has established a pottery in which each patient must do enough work to pay his share of the expense.

The following were on February 27th elected members of the Los Angeles County Medical Association:

Dr. Carleton Dederer, Box 123, L. A.; P. & S., N. Y., 1907; Endorsed by Drs. C. E. Zerfing and C. W. Norton.
 Dr. John H. Slater, 317 Black Bldg., L. A.; P. & S., Ill., 1898; Endorsed by Drs. D. D. Thornton and E. R. Bradley.
 Dr. Wendell P. Blake, 917 Brockman Bldg., L. A.; P. & S., U. S. C., 1913; Endorsed by Drs. C. W. Pierce and W. H. Mayne.

Dr. Dwight S. Bowen, 269 I. W. Hellman Bldg., L. A.; P. & S., Ga., 1900; Endorsed by Drs. C. L. Bennett and Fred Bowen.

Dr. Harlan Shoemaker, 2005 Congress St., L. A.; Pa., 1902; Endorsed by Drs. Rea Smith and J. J. VanKaathoven.

Dr. C. L. McClish, 1760 W. Adams St., L. A.; U. of Cal., 1904; Endorsed by Drs. O. O. Witherbee and L. M. Powers.

Dr. Leonard Stovall, 1325½ E. 9th St., L. A.; U. of Cal., 1912; Endorsed by Drs. C. L. Allen and G. H. Kress.

Dr. Jas. M. Conerty, care Cal. Hospital, L. A.; P. & S., Ill., 1912; Endorsed by Drs. Walter Lindley and Granville MacGowan.

Dr. H. W. Edwards, 323 Marsh-Strong Bldg.; Bellevue, 1897; Endorsed by Drs. A. S. Lobingier and W. W. McKenzie.

Dr. Jennie H. Anderson, La Vina Sanatorium, R. F. D. No. 2, Pasadena; Colorado, 1911; Endorsed by Drs. H. B. Stamen and C. McQuiston.

Dr. C. E. Phillips, care Dr. Zeiler, Brockman Bldg.; P. & S., Ill., 1903; Endorsed

by Drs. A. H. Zeiler and Walter Wes-sels.

Dr. Albert Allen, 5423 Vermont Ave., L. A.; P. & S., Ill., 1912; Endorsed by Drs. L. Shulman and A. F. Charlton.

A writer in the *Westminster Review* (January, 1914) opposes cremation, as it is wasteful. He says in London "all diseased meat and offal is passed through a steam-heated cylinder under high pressure, and is converted from a source of evil into a brown powder, which is an excellent fertilizer and finds a ready sale as manure." This progressive Englishman says: "Is there any reason why human remains should not also be converted into fertilizers under suitable civic conditions?"

TUBERCULOSIS NOTES.

ARTIFICIAL PNEUMOTHORAX.

J. L. POMEROY, M.D., MONROVIA, CALIFORNIA.

The evolution of a sane therapy from a mechanical standpoint for pulmonary tuberculosis forms an interesting chapter in medicine. Carson's notable conception which he published in 1822 in England, that consumption, abscess, and hemorrhage might be cured by allowing air to enter the pleura and thus bring about a collapse of the diseased lung, seems to have fallen at that time upon barren ground. We have no record of its practical application upon the human being until about 1882, when Forlanini attempted it. It is stated that he learned the great secret of nature's cure from a contemporary case published by Bosisio and from that of Stokes. Ewart states that artificial pneumothorax was first successfully used as a treatment for pulmonary hemorrhage by Wm. Cayley in 1885 at the Middlesex Hospital.

The evolution of this method of treatment for pulmonary tuberculosis seems to have been based first upon accidentally produced pneumothorax in persons with pulmonary lesions, the air

entering the pleural sac from wounds by sabre or bullet; such instances are mentioned by Carson as occasionally resulting favorably to the individual. Next comes Carson's experiments on lower animals, in which he showed that one lung may be safely put out of function without serious detriment to the animal. Again some of the best examples of the wonderful healing influence of compression and enforced rest of a seriously diseased lung come from those cases of spontaneous Pn.* occurring in the natural course of the disease. Again there might be mentioned the vaguely felt long known favorable influence of fluid compression such as occurred in pleuritic effusion, vague views regarding the antagonism between emphysema and tubercle; attempts at mobilization of the chest wall by means of strapping or the direct pressure of heavy weights; all of these ideas resting on the basic principle of enforced rest of the lung.

One of the best examples of healing of the lung following spontaneous Pn.

*Pn.—Pneumothorax.

which I have seen no mention of, occurs in Bennet's Practice (1860); Bennet, however, had no vision of the modern extension of the underlying principle. There are now on record not a few similar cases, notably those collected by Spengler. I have seen complete healing of an extensive lesion throughout the right lung take place during the course of a year in a patient in whom spontaneous Pn. occurred. This case I have reported elsewhere. It was a striking example of the wonderful effects of compression and has done much to convince me of the practicability of the method, as this patient has now remained well for a period of three years.

Artificial Pn. certainly must have been put into practical use prior to 1837, for in that year we find Morton in his book on Consumption condemning it in the following words: "It is obviously one of the most unpromising expedients that human ingenuity has yet devised in this disease; nor should I have noticed it here had it not absolutely been put into practice." So far as present day activity is concerned it is to Murphy and Lemke that we must look for the great impetus (1892).

On account of the death of Lemke and other reasons the work was not carried on in a systematic manner in America and thus the great bulk of the reports of this operation have come from the Brauer School and also from the Italian workers. The application of the method in general through the United States is indeed quite recent. In England, Lillington, Vere Pearson and others have done pioneer work in its public demonstration.

It may seem astonishing that it has taken so long for this remarkable life saving operation to have really received an introduction to the general public, yet it must be remembered that the usual picture before the minds of the average man of Pn. is that of a dying patient gasping for breath. Pneumo-

thorax usually occurs during the last few remaining days or months of the clinical course of the disease, being the cause of death in about five to ten per cent of all cases. A few who happily had enough lung tissue to sustain them, and escaped the oft following sepsis, convinced their physicians that Pn. was after all one of nature's attempts at cure; nevertheless the overwhelming majority if they did not die from shock within a few hours, lived to suffer exhaustingly from sepsis and few survived longer than a few weeks at the utmost. Thus Pn. received a bad name and it will take a long time to convince the great majority that artificial Pn. performed under the most strict asepsis and with all due care is a simple and easily controlled operation with a clinical picture as different from that of the usual high tension spontaneous Pn. from a lung fistula, as day is from night.

While it is an easy task to thus skim over the early history of this subject it is by no means so easy to summarize the work of recent times. Spengler gives references in the *International Centralblatt* to over five hundred papers on this subject. I shall therefore give only a very cursory review of this subject interpolated with my own opinions and ideas. Much of the work is as yet inconclusive for the reason that sufficient time has not yet elapsed since the treatment of the individual patients. Again there still exists considerable difference of opinion as to methods of operation, how much gas to use, the selection of the patients, and so on through all the interesting details. It must be remembered that in many instances we are attempting to save an otherwise doomed individual, and therefore a good result in such cases means a great deal more, than if the method were merely the operation of election, not of necessity. Percentages of recoveries and other such data

must be interpreted with these facts kept carefully in mind.

Principles and Indications.

The other lung. There are two main factors at work in every case of induced Pn. Rest of the compressed lung and over-work (relative) of the other lung. In order for the success of the procedure to be assured this "other lung" must be capable of carrying the burdens imposed upon it. Herein lies the keynote of the entire matter. Therefore it is the gravest question which confronts us to estimate whether the other lung is sound enough to stand the additional strain. The criterion among a great many is that the other lung must not contain any active tuberculous lesion, and what more difficult thing is there to estimate than that of quiescence and activity. The truth is that neither the physical signs nor the X-Ray shows us absolutely whether the signs present indicate activity or not. Moist rales may rapidly appear in the other lung after the operation which were not present under the previously existing conditions. In many instances these rapidly disappear and again they often increase and lead to failure of the attempted treatment. So far as I am aware there is at the present time no way of foretelling what will happen.

Clinical Example.

A. H. Moderately advanced case. Widespread lesions through the entire left lung; cavity in the apex. No signs of an active lesion in the right lung. Indication for Pn. Obstinate recurring hemorrhages for a period of several weeks. Patient exhausted. Operation. Complete collapse of the left lung during the course of one week. Result: Hemorrhages stopped. General condition rapidly improved. No temperature. After ten days right lung gradually filled with moist rales, temperature increased slightly. In spite of withdrawal of the nitrogen from the left pleural sac patient gradually sank and died. Conclusion: While the Pn.

stopped the hemorrhages the functioning capacity of the right lung was not competent to carry the burden, secondary cardiac dilatation resulted and death resulted.

Example of the opposite type.

E. M. Widespread lesions through the entire left lung, cavity in left upper lobe, fever, rapid pulse, recent hemorrhages. Right lung apparently quiescent. Indications for operation. Recurrent hemorrhages followed by broncho-pneumonia in left lung (tuberculous.) Temperature 97° in A.M., 104° P.M., daily chills, sweats, exhaustion. The outlook in this case was indeed very grave. Operation. Complete Pn. in one week's time, three fillings of pleural cavity. Immediate result, drop in temperature, increase in sputum, no more blood, gradual improvement of the patient. This patient has made a steady improvement and has gained in four months nearly twenty pounds. Through the right upper lobe immediately after the operation there were a large number of fine moist rales and they had an ominous import; yet in a few days this area was entirely clear, and the subsequent course of the case has been without mishap. I may state that I have never seen a case of this kind leave the bed after the process got started and I believe that such a result could have been attained by no other known means.

These two cases, rather briefly given, illustrate the difficulty of estimating what the other lung will do under the additional strain. The first case went bad, yet everything looked to the contrary; this case was seen and treated in consultation with Dr. B. C. Davies, Dr. L. N. Wheeler, Dr. H. E. Kirschner and others of Monrovia. While the immediate results were excellent, nevertheless the right lung and heart could not stand the burden. In the other case was sepsis, hemorrhage, exhaustion and profound general disturbance, ap-

parently with little chance of recovery under the best of circumstances, as instanced by Dr. F. N. Robinson, with whom the case was seen. Yet in this case an almost ideal result was attained, simply because the "other lung" and the heart successfully stood the strain.

In these two cases from my own experience the difficulties were not operative nor technical. No difficulty whatever was had in introducing the gas, the pleural layers separated easily, there was no complication in connection with the operative work whatever.

Thus it is to be noted that in artificial Pn. we are applying in one dose two medicines, the effect of one of which is entirely problematical. By compressing one lung we cause over-ventilation, expansion and hyperfunction of the opposite; with immobilization we at the same time practice hyperactivity. In the one instance to a tuberculous focus we apply rest, in another focus we apply hyperactivity; and in many instances this diametrically opposite method of treatment seems to succeed. This thought could be much elaborated and along this line much yet remains to be done. At the present time we are very much in the dark even with the help of the radiograph. This latter is of the greatest aid after the operation as there is no other way of accurately estimating the anatomical conditions produced.

The other great difficulty or obstacle in the way of success is the presence of adhesions which change the latent cavity of the pleural sac into an actual closed sac. It has here again been shown that whereas in about one-fourth of all cases the adhesions will be so dense that the production of a satisfactory Pn. is out of the question, nevertheless in many cases success has attended in many patients in the late stage of the disease where adhesions were most expected; also a success has resulted after a large number of fail-

ures; again failure has resulted in early cases where adhesions of a dense nature were not expected. Several ingenious methods of breaking up the adhesions have been devised, such as by first introducing salt solution under pressure prior to the introduction of the nitrogen; this and other methods await further use.

Summary of the effects of Pneumothorax.

On the Diseased Lung.

Unilateral physiological rest. Unilateral compression. (a) Absolute; (b) Relative. Emptying of all pockets and air spaces; dehydrating effect. Drainage of all septic fluids. Immobilization of the lymph currents, arresting auto-inoculation. Passive detoxication of the entire body. Reduced circulation, squeezing together of cavity wall, arresting hemorrhage, gradual fibrosis around tubercles, death of the bacilli due to increase in the CO₂ (Carbon dioxide) and decrease in the oxygen content of the blood. Healing of the tuberculous area. Final re-expansion of the lung.

Effects on "The Other Lung."

Unilateral hyperactivity. Unilateral expansion. Later actual hypertrophy. Possible danger of aspiration of septic material into smaller tubes. Increased circulation, danger of stirring up latent foci or of rupturing small aneurismal dilations of vessels. Again healing of the latent or quiescent foci may result from over-ventilation.

Effects on the General Condition and Other Organs.

During first twenty-four hours may be fall in blood pressure, later followed by a rise higher than before. At first slight loss of weight, later followed by a gain. General toxic symptoms disappear. Sputum increased at first, later decreased; bacilli gradually disappear. Hypertrophy of the right ventricle; increased pressure through the pulmonary artery through the other lung; lessened

pressure in the diseased lung. Increase in the red blood cells and in the hemoglobin comparable to altitude effects. Possible gastric, cardiac, liver, intestinal disturbance due to pressure and displacement phenomena. General rise in immunity forces.

The Risks.

Operative and secondary. Air embolism, fatal and non-fatal. Rare. Common enough is the escape of the gas from the pleural opening under the skin and other tissues. Discomforting, but not dangerous. Infection of the pleura with empyema or a localized infection. Puncture of the lung with the formation of a lung fistula has occurred but very rare; patient may spit a little blood after the operation from wound in the lung. Sudden shock has been known to follow the introduction of gas into the pleural sac thought to be avoided by warming the gas to body temperature and the use of morphine and atrophine before operation with thorough cocaineization with novacain of the puncture area and pleural layer. Injuries to the intercostal nerve may occur. Fifty per cent of all cases develop pleural effusion within a month or two following the operation, thought by some to be tuberculous, due to the rupture of hypothetical foci within the pleural sac. Others claim due to slight infections introduced with the trocar. Fluid usually remains sterile. Does no harm. Rupture of a mass of tubercles or of a superficial cavity under the pleura may take place. Dense adhesions may be present and are to be expected in from 25% to 50% of all cases. With the careful use of the manometer one can avoid introducing air into the lung itself.

Most of the operative risks can be minimized by careful technique, which will be discussed later.

One Lung Danger.

By this is meant the dangers inherent in a patient at the mercy of an intercurrent infection which not

ordinarily fatal such as pneumonia, influenza, pleurisy with effusion, but would rapidly suffocate the patient with such diminished breathing capacity. Also the patient with one lung functioning seems to be subject to various reflex vaso-motor, neuro-reflex, nervous and circulatory dangers and symptoms. I have observed in these and other cases an asymmetrical blood pressure in the two arms due to changes in position of the great vessels and kinking of the subclavian artery where it crosses the apex of the lung.

The Air Danger.

By this is meant particularly the sudden interference with the function of the remaining lung by the rupture of a superficial lobule of the lung causing a pneumothorax on the good side. That this has not occurred is really a remarkable thing. Neither has pleurisy with effusion of the good side been so far noted. Nor has any case of a rupture thru the mediastinum been reported.

The Blood Danger.

By this is meant the rupture of a small vessel in the good lung with drowning of the patient. That small aneurismal dilations occur thruout the tuberculous areas is a well known fact. Cases are on record of hemorrhage from the remaining lung. It must be remembered that a considerable increased strain is thrown upon the vessels in this lung. It is likewise often a question as to where the bleeding is coming from and one might readily compress the wrong lung, which of course would be disastrous.

General Risks.

Pressure on the diaphragm may interfere with the functions of the intra-abdominal organs and render feeding and nourishing the patient difficult. A marked reaction (tuberculin?) may occur immediately following the operation about the latent foci in the other lung due to swamping the circu-

lation with toxin. Also sepsis may occur by shutting off in a cavity of septic material.

Marked displacement of various organs may occur bringing about cardiac weakness, edema of the lung and death. The subjective symptoms, shock, dyspnoea etc., may be at times intense and out of proportion to the amount of gas introduced. Of course many of these various dangers and complications are more or less hypothetical, still they should receive due consideration. Anyone who practices artificial Pn. in the treatment of pulmonary tuberculosis will feel an intense interest in all of the little details connected with the operation, its complications, its dangers and its wonderful results.

In particular should be mentioned here the work recently done showing that in Pn. there is an increase in the hemoglobin and in the red blood cells comparable to the effects observed in altitude. This appears to be not a mere concentration of blood plasma but a new formation of blood components concerned in oxygen carrying function. Also Bruns in a recent number of the *Beiträge* reaffirms his belief that the effects upon the right heart bring about a dilatation and hypertrophy, confirming the observations of Carlström. Bruns states that his findings from anatomical material are: the alveoli are emptied of air, the smaller blood vessels are anaemic, the lymph circulation much diminished, only in the larger blood vessels of the compressed lung was any large quantity of blood to be found; the blood becomes richer in carbon dioxide thus hindering the growth of tubercle bacilli, also the oxygen content is lessened. There is not, as some hold, a general widespread thickening of the connective tissue through the lung due to disturbed circulation, but only isolated inflammatory thickening about the tuberculous foci, which eventually results in fibrosis and walling off of the area. There is both pleural

and peribronchial thickening about the infected areas. Bruns disagrees with Burkhard and Kaufmann, who claimed that also obliteration of the alveoli and smaller bronchi occurred in the healthy lung tissue.

Indications. Weighing all the chances it must be admitted that Murphy's original conception that the operation was best suited for those monolobular infections in the early stages of tuberculosis, where the complications would be least, is correct. Nevertheless it may be stated that artificial Pn. will never be the treatment of choice in early cases, unless a radical change takes place in our ideas. There is still a great deal of difference in opinion as to what cases are suitable for Pn. treatment and what are not. There are as usual two main camps, those who use it and those who refuse to have anything whatever to do with it as a method of treatment and condemn it simply out of a false theory that they either must use the method or condemn it. These same men who condemn Pn. as a method of treatment are strongly advocating tuberculin treatment and sanatorium treatment for advanced cases and yet these are the class of cases that the tuberculin and sanatorium have done the least for. Refusal to give this class of case a trial under Pn. on the basis that tuberculin will cure them is not only unscientific but pedantic. Again the deaths that occur in the Pn. cases in the advanced class group are no more to be weighed against the operation than the operative treatment of cancer in its last stages.

Pneumothorax is indicated particularly in those cases where the lesion is mainly in one lung, and the disease is progressive in spite of all ordinary methods of treatment. In the ideal case there should be fair nutrition, no larynx or intestinal tuberculosis, the heart muscle intact, the other lung containing a healed or quiescent lesion and it should not be bound down by pleural

adhesions so that compensatory expansion cannot occur. At least one year's time should be given to the treatment, but it is not necessary for the patient to remain in a sanatorium all this time.

Pneumothorax may be done with a fair degree of success in those cases where even a slightly more active lesion is present on the opposite side, if the clinical course of the case has shown that no hope is to be held out by other methods.

It is further indicated in all progressive fibro-caseous or fibro-cavernous tuberculous lesions fairly localized to one lung where no means have been found to check the disease. Also in certain acute infiltrative caseo-pneumonic forms of phthisis (as example quoted) with one lung fairly free; also in isolated lower lobe destruction due to large cavity or abscess formation.

In recurrent uncontrollable hemorrhage the operation of Pn. is certainly capable of working wonders and will in nearly every instance stop the hemorrhage. Any man who allows a patient to bleed from the lungs day after day without any effort to try this method is guilty, in my opinion, of wanton neglect.

Contra-indications. Any very active disease in the other lung may be a contra-indication except in the presence of uncontrollable hemorrhage. Clinically stationary disease in the other lung is no contra-indication. Generally speaking patients in very bad nutrition, or with bowel or larynx complications are not good subjects. In patients with serious non-tubercular diseases also it is not indicated. Patients with asthma and emphysema do not bear the operation well. The same, of course, applies to cardiac and renal complications.

Evans Bldg., Monrovia.

THE ORIGIN OF A BORAX MINERAL.

It is generally recognized that boric acid in considerable quantities is an

original constituent in the waters and gases given off with volcanic emanations. In fact, the Tuscan fumaroles, in Italy, have been an important commercial source of boric acid for a long time, and in the past, possibly even to the present time, also almost all the boric acid brought into the European market has been derived from this source. There is abundant evidence of the presence of boric acid in volcanic emanations in many parts of the world. On the other hand, boron is so rare a constituent of rock-forming minerals that it forms an almost inappreciably small percentage of the earth's rock mass as a whole.

A short study of the borate deposits in Ventura county, Cal., supplemented by more cursory examinations of similar deposits in the vicinity of Death Valley, has been made by Hoyt S. Gale of the United States Geological Survey, and a new theory of the origin of the deposits of colemanite, or borate of lime, in these regions has been advanced by Mr. Gale in Professional Paper 85, Part A, recently published by the Survey. While this theory has not yet been entirely proved, there is much in its favor and it affords suggestions and a working basis for further observation.

The supposition of a desiccated saline lake to explain the origin of the colemanite has little to support it beyond rather general assumptions. The character of the deposits themselves indicates rather a vein type of formation. Other salines which would naturally be expected in desiccation deposits resulting from natural saline solutions are not found in association with the colemanite. Those who have supported the desiccation theory have offered no explanation of the cause which might produce colemanite in such massive deposits as a product of water evaporation, while, on the contrary, its formation from limestone in veins by replacement of carbonic acid with boric acid is a natural hypothesis that deserves

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further investigation. The relations of the deposits to basalt lava flows indicate the probable origin of the boric acid at the time of the extrusion of these lavas, although it may be assumed that this acid continued to find its way into solution of the circulating ground waters long after the period of the extrusions.

A copy of Professional Paper 85, Part A, may be obtained free on application to the Director of the Geological Survey, Washington, D. C.

"THE PHENOL-PETROLATUM TREATMENT FOR TUBERCULO- SIS."

Any therapeutic agent that is a logical, theoretical, and successful treatment for pulmonary tuberculosis must necessarily be of value, and give equally as good results in glandular and bone involvements. From the author's own results, and from reports made to him from other physicians throughout the country its value in the treatment of pulmonary tuberculosis has been clearly demonstrated. It is with the hope that physicians who have bone and glandular cases under treatment will give phenol-petrolatum a trial that the author presents this article. The writer contends that phenol-petrolatum bears the same relation in its specific action in tuberculosis that the mercurials do in syphilis; and contends that it must, therefore, give good results in the treatment of bone and glandular cases. Phenol-petrolatum has been given freely to the profession. It is not a proprietary preparation or is its manufacture or use restricted in any way. It is nothing more than a one per cent of carbolic acid incorporated in liquid petrolatum.—Stanley Lewis Warren, M.D., in the Texas Medical Journal.

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Dr. White, of the University of Dublin, made careful detailed studies as to the action of petroleum upon the various micro-organisms. His investigations proved that inasmuch as petroleum offers no food for bacteria they cannot thrive in this medium. By an elaborate series of laboratory experiments Dr. White found that petroleum emulsion (Angier's) inhibited alcoholic, lactic and butyric fermentation, as well as the growth of putrefactive bacteria, which have their natural habitat in the intestinal canal.

This explains the clinical fact that this excellent preparation relieves the symptoms due to the by-products of the various fermentations, and shows why auto-intoxication, resulting from the growth of putrefactive bacteria and their toxins in the intestines, is not

possible when it is administered.

In much the same line are reports made by Dr. W. E. Fothergill, director of the Clinical Laboratory, Manchester, England. In a recent publication he says: "We kept complete notes in 34 cases of infantile diarrhoea. One of the children died after various treatments had been tried. In two cases salol was substituted at the end of the week for petroleum, and in the remaining 31 cases, recovery occurred rapidly and completely without any treatment beyond the administration of the petroleum emulsion (Angier's). We did not notice any derangement of the stomach in the cases so treated, indeed, the vomiting ceased, as a rule, almost before the diarrhoea was checked. The motions began to be less frequent after two or three doses, and rapidly resumed their normal smell, colour and consistence. It was further obvious that the treatment in some way favoured recovery

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from the bronchial catarrh which accompanied the diarrhoea in a large proportion of the cases."

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"Good morning—Now tell me, has Nellie had 'measles?' "

"They've all on 'em 'ad it and also the 'weasles' " (pediculi)

"And when did she have it?" I ask with a smile.

"When we was at Beenham—a tidy long while."

"Don't know when that was"—I try not to snap

"When I was a-nursing young Tom on my lap."

"But how old is Tom, and how old was he then?"

"Why Tom was jest two years the younger of Gwen."

"When did she have measles? I'm talking of Nell."

"Ah! now you're a' hasking I can't rightly tell."

"Never mind we'll try chicken-pox, has she had that?"

"Lor' bless ye—'ad everythink under your 'at."

"Well! has she had chicken-pox—one at a time."

"I can't say she 'as 'ad it quite by that nyme"

"Well! was it the blister-pox surely you know?"

"No, Nell ain't 'ad blister-pock that was young Flo," (deep sighs)

"Has she had 'scarlet,' diphtheria, mumps?"

"Nooa, I don't think she 'as—she gets down in the dumps."

"Well, what has she had? I thought you said all

Of the childish complaints, but maybe you call

Them by different names?" "Well, she once was in bed

*When I was a school medical inspector for Berkshire County, I found that it was not a bed of roses.

In this absolutely veracious account of an average interview with the English recondite country mama I have tried to take the humorous view to stave off irritation.

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Fer two days with a shocking bad cold in the 'ed."

"Well! please get her clothes off—don't stop whilst I speak

I want to examine her chest." "Ah! that's weak

Sir! I hope you look carefully too."

"How so? Does she cough?" "Well! I can't say she do."

"Then does she get thinner?" "No suit-tingly not

I gives to them childer the best that I've got."

• • •

"Is there any family illness? In your father or your mother,

Brothers, sisters, cousins, uncles, aunts? Just think of any other."

At last I've struck a fertile vein, she rattles off a list

Of uncles who had tumours twice as large as father's fist,

And brothers with consumption who all lived down in the "Pudden"

All with "galloping" consumption and her father he died sudden

While drinking at the 'Arrow*'—'ad a kinder-sorter fit.

And the neighbors who assisted him all swore as they was bit."

I write it down religiously with just a grain of salt

Then turning to examine come to quite a sudden halt,

For there to my amazement stands the wretched little maid

Without a stitch of clothing on—I wonder what I said

To make this worthy woman go to such a grave excess.

More precious time is wasted 'ere the child is in its dress.

Each child's allowed ten minutes—I have learnt my lesson now;

To obtain terse information come to me, I'll show you how

CHORUS.

Oh speak to them gently, but turn off the gas

You must know at a glance if a mother's an ass,

Don't cut short a story that's got some-thing in it

But when you scent vapour don't let 'em begin it.

Regarding the clothing there's many a wheeze

And rather than shew it they'll let the child freeze,

When hunting for "weasles" you make it quite clear

You merely intended to look at the ear, But what you discover's a painful sur-prise:—

Thus bringing not fury but tears to their eyes.

Cecil E. Reynolds, 1910.

*The Pudden is a boggy village.

**The Harrow is an Inn.

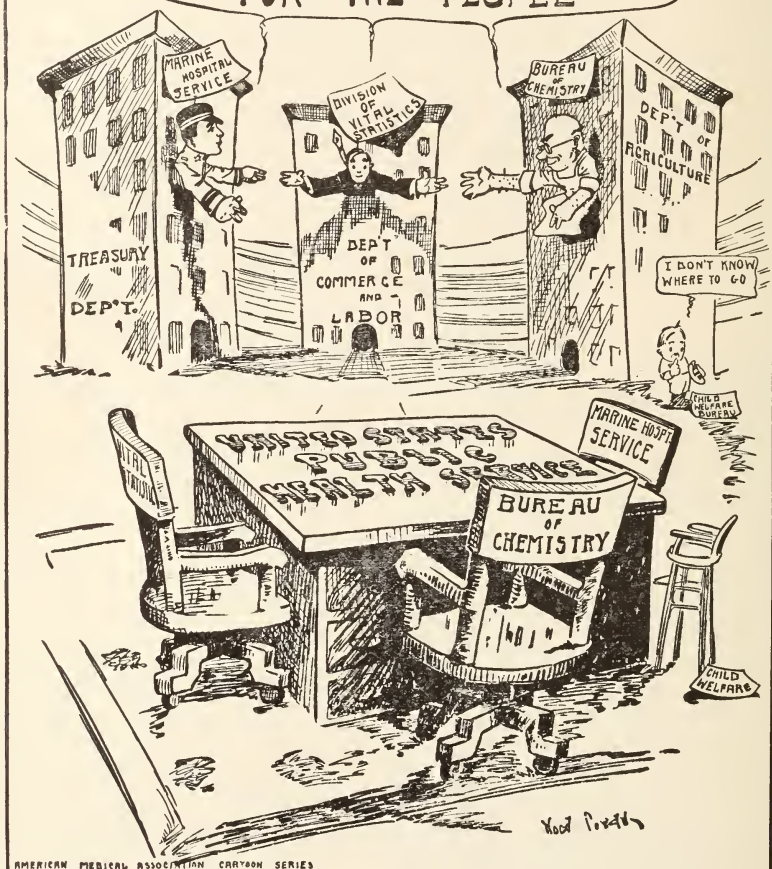
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SOUTHERN CALIFORNIA PRACTITIONER

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THE DOCTOR'S DREAM.*

BY VICTOR C. VAUGHAN, PRESIDENT AMERICAN MEDICAL ASSOCIATION,
ANN ARBOR, MICHIGAN.

Dr. Smith is a practitioner in one of the large cities of the Middle West. He is a man of good training, a classical graduate, took his professional course in one of our best schools, and did hospital service both at home and abroad. He is a general practitioner and keeps well posted in all that he does. He makes no claim to universal knowledge or skill, but is conscientious in all his work, and when he meets with a case needing the service of a specialist he does not hesitate to call in the best help. He has made a good living, demands fair fees from those who are able to pay, and gives much gratuitous service to the poor. He is beloved by his patients, held in high esteem by his confrères, and respected by all who know him. He is a keen observer, reads character for the most part correctly, and is not easily imposed upon. While he recognizes the value of his services, he is not in the practice of medicine

with the expectation of getting rich, and his interests are largely human and scientific. He has deep sympathy for those whose ignorance leads them to sin against their own bodies, but he is devoid of weak sentimentality and does not hesitate to admonish and even denounce the misdeeds of his patients whatever their social position. During twenty years of practice in the same locality he has become acquainted with the vices and virtues of many families.

He is not looking for the coming of the millennium, but he is often impatient of the slow pace with which the race moves toward physical, mental and moral betterment. One of his patrons is a large manufacturer employing many unskilled laborers. Dr. Smith has often pointed out to this man that the efficiency of his working force would be multiplied many times were the men paid better wages, the work done in rooms better lighted and ventilated, and

*An address delivered before the Seventh Annual Meeting of The Association of Life Insurance Presidents, has appeared in Science, and is here published with the consent of the Author.

in general with a little more humaneness shown them. Another is at the head of a big mercantile house which employs clerks at the lowest possible wages and makes the conditions of life well nigh unendurable. A wealthy woman gives largely to church and charity from her revenues which come from the rental of houses in the red-light district. Another of the doctor's patrons is a grocer who sells "egg substitutes" and similar products "all guaranteed under the pure food law." We will not continue the list of the doctor's patrons, and it must not be inferred that all are bad, for this is not true. The majority are honest, conscientious people, as is the case in all communities. Our country has a population of nearly one hundred millions. Millions of these are decent, respectable citizens, not altogether wise, but for the most part well intentioned. Thousands are brutal in their instincts, criminal in their pursuits, and breeders of their kind. We claim to be civilized, but there are those among us who would be stoned to death were they to attempt to live in a tribe of savages.

But I must stop these parenthetical excursions and get back to Dr. Smith and his dream. On a certain day in November of the present year he had been unusually busy, even for one whose working hours frequently double the legal limit. During his office hours he had seen several cases which gave him grave concern. There was William Thompson, the son of his old classmate and college chum, now Judge Thompson. William finished at the old University and is now an embryo lawyer promising to follow in the footsteps of his honored and honorable father, but William belonged to a fast fraternity at college and came to Dr. Smith this morning with copper-colored spots over his body and a local sore. The doctor easily diagnosed the case and pointed out to William that he was a walking culture flask of spirochetes, a constant

source of danger to all who should come in contact with him, and that years of treatment would be necessary to render him sound again. On the lip of a girl, the daughter of another old friend, the doctor had found a chancre caused by a kiss from her fiancé, a supposedly upright man prominent in church and social circles. He had seen a case of gonorrhea in a girl baby contracted from her mother, the wife of a laboring man. A case of gonorrheal ophthalmia in a young man whose only sin was that he had used the same towel used by an older brother next demanded his attention. Several cases of advanced tuberculosis among those who had been told by less conscientious physicians that the cough was only a bronchial trouble made Dr. Smith lament the standard of skill and honor among some of his professional brethren. Rapid loss in weight in an old friend who had been too busy to consult him earlier was diagnosed as neglected diabetes. In another instance dimness of vision and frequent headaches persisting for months had not sufficed to send an active business man to the physician. This proved to be an advanced case of Bright's Disease, which should have been recognized two years earlier. Urinary, ophthalmoscopic and blood pressure tests demonstrated the seriousness of the present condition. A breast tumor on the wife of an old and respected friend showed extensive involvement of the axillary glands and the operation demanded promised only temporary relief, while had it been done months before, complete removal of the diseased tissue would have resulted.

In making his calls for the day Dr. Smith had experienced both among the well-to-do and the poor many things which had brought within the range of his vision more and darker clouds than those which floated in the dull November sky. More than a year before he had become estranged from the family of one of his oldest and best friends. The breaking of this relationship,

which had continued from his earliest professional service and had been filled with the common joys and sorrows shared only by the family physician and those under his charge, had cast a deep shadow over the doctor's life. He had officiated at the birth of each of his friend's five children and he felt a parental love and pride in them as he saw them grow into healthy womanhood and manhood. A little more than a year ago he learned that the eldest of these children, a beautiful and healthy girl of eighteen, was engaged to a young man whom he knew to be a rake. In a spirit of altruism he had gone to the father and mother and protested against the sacrifice of the daughter. This kindly intended intervention was met with a stormy rebuff and the doctor was rudely dismissed from his friend's house. But when the young woman, whose life with her unfaithful husband had made her deeply regret her fatal infatuation, felt the first pains of childbirth she begged of her parents that her old friend might be sent for, and that morning he had delivered her of a syphilitic child. How unlike the previous births at which he had officiated in this friend's house! It had been the custom to have the doctor at every birthday dinner given the five children, and one of the boys bore his name. There would be no birthdays for this, the first grandchild, and what could the future promise the young mother? Surely, the November day was overcast with clouds for Dr. Smith before its gray light awoke the slumbering city. As he walked the few short blocks from his friend's to his own home, he cried in deepest sorrow how many thousands of daughters must be sacrificed before their parents will permit them to walk in the light of knowledge and not in the shadow of ignorance. After a breakfast, which was scarcely tasted, he read in the morning paper that the announcement that "Damaged Goods" was to be given in his University town

had met with such a storm of protest from the learned members of the faculty that the engagement had been canceled. "Surely," he said, "the fetters of prudery and custom bind both the learned and the unlearned."

After his morning office hours Dr. Smith visited his patients at the city hospital. Here is a wreck from cocaine intoxication, the poison having been purchased from a drug store owned by a prominent local politician. In a padded cell is a man with delirium tremens, a patron of a gilded saloon run by another political boss. In the lying-in ward are a dozen girls seduced in as many dance halls, with drinking alcoves. Time will relieve these girls of the products of conception, a longer time will be required to free them from the diseases which they have contracted, but all time will not wash away the stains on their lives, and what of the fatherless children to be born? Thirty beds are filled with typhoids, who under the best conditions must spend long weeks in the bondage of a fever, which day by day gradually but inexorably tightens its grasp. The furred tongue, glazed eyes, flushed cheeks, bounding pulses, emaciated frames, delirious brains were all due to the fact that a large manufacturer had run a private sewer into the river above the water works. The greed and ignorance of one business firm had been permitted to endanger the lives of half a million of people.

In his family calls the doctor met with conditions equally lamentable. A fond mother in her ignorance had nursed a sore throat in one of her children with domestic remedies. The membranous patches on the tonsils, extending upward into the nasal passages and downward into larynx, and the cyanotic face with labored breathing showed that even the magical curative action of diphtheria antitoxin, that wonderful discovery of modern medicine, would be of little avail in this

individual case. The other children were treated with immunizing doses, and the doctor had the consolation of knowing that death's harvest in that household would be limited to the one whom the mother's ignorance had doomed.

The next call brought Dr. Smith to a home in which the condition was equally deplorable and still more inexcusable. One of the children some months before had been bitten by a strange cur, which soon disappeared in the alley. The wound was only a scratch and was soon forgotten. Now, the child was showing the first symptoms of that horrible disease, hydrophobia. But dogs must not be muzzled. Women with plumes, torn from living birds, in their hats, formed a society for the prevention of cruelty to animals and so declared.

It must not be inferred that all of Dr. Smith's experiences on that November day were sad. Men are mortal; all sickness is not preventable; accidents will happen and distressing injuries result. This world is not an Eden and no one expects that all sorrow will be banished from it. Decay and death approach with advancing years. Strength and weakness are relative terms, and those possessed of the former must help bear the burdens of those afflicted with the latter. Dr. Smith being a hard-headed, reasonable, scientific man, is no Eutopian, and he frequently meets in sick rooms experiences which greatly increase both his interest and his confidence in man. He finds the young and vigorous denying themselves many pleasures in order to brighten the pathways of the old and infirm, the fortunate lending a helping hand to the unfortunate, and the wise leading the unwise. No one, more than the family physician, can measure and appreciate the innate goodness that springs without an effort from the heart of humanity. It is difficult for the physician of large experience to unre-

servedly condemn anyone, and he is inclined to regard all sins as due to either heredity or environment. However, it must be admitted that on this day Dr. Smith had seen but little sunshine, and the clouds that had gathered about him had hidden the virtues and magnified the vices of his community, and especially was this true of the vice of ignorance, for ignorance which results in injury to one's fellows is not only a vice but a crime, a moral, if not a statutory one.

Late that night as the doctor sat before his grate he fell asleep, and now he is busy among his patients in a way hitherto quite unknown to him. His waiting-room is filled with people, old and young, of both sexes, who have come to be examined in order to ascertain the exact condition of their health. A young man before proposing marriage to the woman of his choice wishes a thorough examination. He wishes to know that in offering himself he is not bringing to the woman any harm. He desires to become the father of healthy children and he is not willing to transmit any serious defect to them. He tells the doctor to examine him as carefully as he would were he applying for a large amount of life insurance. The doctor goes through the most thorough physical examination and tests the secretions and blood with the utmost care. He understands his own responsibility in the matter and appreciates the high sense of honor displayed by his patient. A young woman for like reasons has delayed her final answer to the man who has asked her hand in order that the doctor might pass upon her case.

Here is the doctor's old friend, William Stone. Mr. Stone is in the early fifties. He has been a highly successful, honorable business man, has accumulated a sufficiency and enjoys the good things which his wife prepares for the table. A careful examination of the urine leads the doctor to caution Mr. Stone to reduce the carbohydrates in

his food. Mr. Perkins, a lawyer who throws his whole strength in every case he tries, and of late has found himself easily irritated, shows increased urinary secretion and a blood pressure rather high. A vacation with light exercise and more rest is the preventive prescription which he receives. Mrs. Williams, after being examined by Dr. Smith, undergoes a slight operation under local anesthesia, and is relieved of the first and only malignant cells found in her breast. Richard Roe, who is preparing for a long journey, is vaccinated against typhoid fever, a disease no longer existent in Dr. Smith's city, since pollution of the water has been discontinued. John Doe, who is a mineralogical expert and wishes to do some prospecting in high altitudes, has his heart examined.

There are numerous applicants for pulmonary examination. This is done by Dr. Smith and his assistants in a most thorough and up-to-date manner, and advice is given each according to the findings. It has been many years since Dr. Smith has seen an advanced case of pulmonary tuberculosis, and the great white plague will soon be a thing of the past. Everybody goes to a physician twice a year and undergoes a thorough examination. The result of this examination is stated in a permanent record, and no two consecutive examinations are made by the same physician in order that a condition overlooked by one may be detected by another. Cases of doubt or in which there is difference of opinion are referred to special boards.

The average of human life has been greatly increased and the sum of human suffering has been greatly decreased. Preventive has largely replaced curative medicine. Tenements are no longer known; prostitution and with it the venereal diseases have disappeared; institutions for the feeble-minded are no longer needed, because the breed has died out; insanity is rapidly decreasing,

because its chief progenitors, alcoholism and syphilis, have been suppressed. These and many other pleasing visions come to Dr. Smith in his dream, from which he is startled by the ring of the telephone at his elbow. The call says: "Come quickly to Pat Ryan's saloon at the corner of Myrtle and Second. There has been a drunken row. Bring your surgical instruments." Then the smiles which had played over the face of the doctor in his dream were displaced by lines of care, and he went forth into the darkness of ignorance and crime.

There are many Dr. Smiths and they have been seeing pleasing visions in their dreams and meeting with stern realities in their waking hours. Nearly fifty thousand Dr. Smiths constitute the American Medical Association, which is expending thousands of dollars annually in trying to so educate the people that unnecessary disease will be prevented. The doctors are asking that the work of the national, state, municipal and rural health organizations may be made more effective, that the knowledge gained in the study of the causation of disease may be utilized. The world has seen what has been done in Havana and on the Canal Zone, how yellow fever and malaria have been suppressed, and how the most pestilential spots on earth may be converted into healthful habitations for man. Scientific medicine has made these demonstrations and the world applauds, but seems slow to make general application of the rules of hygiene.

Dr. Foster had experienced the doctor's dream when he said to you, in 1909: "I look forward with confidence to the time when preventable diseases will be prevented, and when curable diseases will be recognized in the curable stage and will be cured, and I believe the grandest triumphs of civilization will be the achievements which will result from a realization of the possibilities of preventive medicine."

Professor Fisher, a most earnest and intelligent student of the prevention of

sickness and the deferring of death, has stated that "by the intelligent application of our present knowledge the average span of human life may be increased full fifteen years."

It has been proposed that the life insurance companies represented here seek to prolong the lives of their policy holders by offering them free medical re-examination at stated intervals. It has been shown that in all probability this would financially benefit the companies in the increased longevity of their policy holders and the increased number of premiums they would pay. This is a business proposition, and I hope that the companies will inaugurate it and thus demonstrate that the lessening of sickness and the deferring of death will pay. Let the insurance men join the doctors and help in the great work for the uplift of the race through the eradication of unnecessary disease and premature death. In this way we can hasten the coming of the better man by making the doctor's dream a reality. I am confident that you will do this, not because it will pay, but because it is the highest service you can render humanity.

Now, is this a wild dream?

Is it absolutely impossible that part of this dream might not come true?

Very recently, Mr. Hoffman of the Prudential—and there is no one better posted in statistics than he—has shown that if the death rate from tuberculosis which prevailed in this country in 1901 had continued up to and including 1910, there would have been 200,000 more deaths from tuberculosis than there were.

The average age at which people die from tuberculosis is thirty-five years. Mr. Hoffman concludes from his studies, and there can be no question about their accuracy, that more than a million of years, in the aggregate, have been added to human life by the very slight effort that we have made—the people

have made—to lessen the death rate from tuberculosis.

Since 1882, the time of the discovery of the tuberculosis bacillus, up to the present time, taking the civilized world all over, the deaths from tuberculosis have been reduced 50 per cent. They are one-half what they would have been if the death rate prevailing at that time had continued. Now, if that has been accomplished, what may we not expect to accomplish? Mr. Hoffman, however, very properly points out that it is not going to be so easy to get rid of the next 50 per cent. of deaths as it was the first. It is more difficult to reach the ignorant. We have reached the intelligent. It is more difficult to get down to the deepest causes of this disease and its transmission, and a greater effort must be made.

You will pardon me if I point out to you two or three ways in which preventive medicine has been of service to you, and I will confine myself to the work that has been done in the present century, since 1900. In the first place, by the work of the American Medical Association, practically all the poor medical schools in this country have been wiped out of existence. The number of schools has been reduced from 163 to 116, and you are getting better practical men to serve you. That is the first thing. In the second place, typhoid fever, as well as tuberculosis, has been greatly reduced. In 1898 one out of every five of the men who enlisted in the United States Army developed typhoid fever. Less than ten years later, when 17,000 men were sent to Texas, only one out of the 17,000 developed typhoid fever. (Applause.) Now, is the benefit that may be obtained from preventive medicine visionary? May this dream not be realized? Then, again, every time that the medical man improves his methods of diagnosis he serves you. I suppose that it is too early to make a definite estimate, but certainly the saving to the insur-

ance companies in this country must be marked by simply the introduction of your tests—of the blood pressure tests. This test has saved you from many dangerous cases which would have died soon. Now, I don't mean to say that you owe the medical profession anything for this. The medical profession has not done it for your sake. It is done for your policy-holders—for the millions of the people—and the American Medical Association, composed of fifty thousand financially poor doctors in this country, is expending today, Mr. President, seventy thousand dollars a year for the purpose of instructing people how not to get sick.

Some years ago we had out in Michigan a Governor who was said to be

very illiterate. I heard him preside at the American Public Health Association, and he spoke of doctors being there for the purpose of preventing sickness, and he said: "If, during my official career, I should be called upon to preside at a meeting of lawyers, met for the purpose of preventing litigation, then I would say, with Simeon, 'Lord, let thy servant depart in peace, for mine eyes have seen my salvation.'"

I want to say to Mr. Cox and other lawyers here that that time has almost come when lawyers are not hunting for precedent in the dim and mystic past, but they are making new laws and breaking all other precedents for the betterment of the race. This is what we are all working for. I thank you very much.

INFANTILE PARALYSIS—CAUSES AND TREATMENT OF DEFORMITY.*

BY JOHN CARLING, M.D., LOS ANGELES.

The causes of deformity in Infantile Paralysis are first, gravity; second, the contraction of unopposed muscles; third, habitual posture, and fourth, functional use.

To illustrate: If the dorsal flexors of the foot are paralyzed, the foot falls forward from the force of gravity plus contraction of the calf muscles. If the foot is not supported, structural shortening sets in and the limb becomes permanently deformed. If, however, the dorsal flexors are intact and the calf muscles are paralyzed the force of gravity is overcome by contraction of the dorsal flexors.

Habitual posture may cause deformity as in complete paralysis when the limbs are placed in certain positions for convenience.

In incomplete paralysis, when the patient begins to use his limbs further deformity is developed by the weight

of the body and the attempt of the remaining muscles to do the work of those that are paralyzed.

Subluxation sometimes occurs from relaxation of ligaments around a joint and lack of muscular support, but complete dislocation is rare.

Deformities of the upper extremity are as a rule not so severe as those of the lower, because of the absence of strain due to weight bearing and the fact that gravity is opposed to muscular contraction.

Paralysis of the muscles of the shoulder may cause subluxation of the head of the humerus and paralysis of the muscles of the forearm distortion of the hand from contraction accommodation and atrophy.

Paralysis of the trunk muscles may cause lateral curvature of the spine. The curvature in these cases is not towards the healthy side as might be

*Read before the Los Angeles County Medical Association February 17, 1914.

supposed, but towards the paralyzed side. This is because the muscles of respiration are involved, producing a caving in of the chest on the affected side and the compensatory enlargement of the chest on the opposite side draws the spine towards it.

In infantile paralysis the extent of ultimate deformity is not limited to the muscles alone, but all the tissues of the affected part share in the atrophy and retardation of growth. It is evident that retardation of growth will be greater during the period of active development, consequently the younger the patient when attacked the greater will be the atrophy and shortening.

TREATMENT.

Active treatment of the paralyzed muscles should not begin until the acute inflammation in the cord has subsided. This may take from one to four weeks or longer and is indicated by the absence of pain and tenderness on handling the limbs. To overcome the tendency to deformity the joints should be manipulated several times daily and the limbs massaged to improve the circulation and nutrition of the muscles.

The galvanic current is of use in obtaining contraction of muscles that cannot be contracted voluntarily. When given alone, however, at irregular intervals it is of little value in restoring function and should therefore be always combined with massage and muscle training. The latter is by far the best means at our disposal for restoring lost power to the disabled muscles.*

In infantile paralysis a hemorrhagic myelitis has attacked the cord and caused more or less destruction. Certain centers may have been completely destroyed while others may have escaped with only slight injury. Moreover some centers may have escaped injury altogether, but their associate centers having been destroyed and being unaccustomed to act alone, their function is lost unless trained to co-ordinate with other centers. Therefore,

there exists in every disabled limb a certain amount of muscular power which is not evident and which cannot be made available unless cultivated. The patient if a child, should never be left to do his own exercises, but should always be aided by parent or nurse. As the response of a muscle depends on the strength of the stimulus, the volition of the patient is greatly aided by a word of command. The exercise should be given daily under the direction of the physician and should be continued as long as improvement is noticeable. If contractions are present they should be overcome before the exercises are begun as it is impossible to strengthen a muscle until the strain on it has been relieved.

MECHANICAL TREATMENT.

The object of a brace is to prevent deformity due to contraction of the unopposed muscles and at the same time encourage functional use of the limb.

In paralysis of the anterior muscles of the leg, the foot drops forward and drags upon the ground in walking, causing the patient to awkwardly lift the knee to prevent stumbling. This deformity is known as Equinus and when fixed produces over extension at the knee, because of the effort to place the heel on the ground. In more severe cases the patient walks on the ball of his foot, causing flexion at the hip joint. When seen in the early stage before the deformity has become fixed, these cases should be provided with a light brace, with a stop joint at ankle to hold the foot at right angle. In all cases where the knee is weak, the brace should extend to the thigh.

Paralysis of the posterior muscles of the leg causes a deformity known as Calcaneus. In this condition the resistance of the foot is lost and the patient walks on his heel. There is also hyperextension at the knee caused by strain on the weakened ham-string muscles.

The indications are therefore a brace with a reverse catch at ankle to pre-

vent dorsi flexion and extending to the thigh to prevent hyper-extension at the knee. In paralysis of the quadriceps extensor, the patient, unable to extend the leg swings it forward and locks the joint by direct contact of its surfaces, and by resistance of the tissues on the posterior aspect of the knee. The joint is thus over-extended.

Paralysis of the quadriceps alone is rare and there is usually associated with it paralysis of the leg muscles. In paralysis of the muscles of the hip the result will depend on the individual muscles affected. When the ilio-psoas is paralyzed it is impossible for the patient to flex the thigh directly and when the abductors are paralyzed he is unable to bring the limbs together.

When all the muscles of the hip are paralyzed the limb dangles, but usually the tensor vagina femoris remains intact producing flexion deformity. As the muscles of the leg are usually paralyzed as well there is great disability accompanied by outward rotation of the limb. In such cases a pelvic band should be attached to the brace with joints at hip and knee to allow flexion in sitting. In young children, however, it is preferable to omit a joint at the knee because of their inability to properly control it. When both limbs are paralyzed double braces should be applied and the patient furnished with crutches if necessary.

If the muscles of the spine are affected a corset may be attached to the pelvic band to prevent Scoliosis or Lordosis.

Paralysis of the arm muscles is relatively rare and seldom requires brace treatment. Unlike the leg which may be braced to support the body, the arm when extensively paralyzed is of little service.

OPERATIVE TREATMENT.

Patients with Infantile Paralysis are usually neglected after the acute stage has subsided and when seen by the Orthopedic surgeon, they are found to

have various contractions and distortions of the limbs.

The first indication in these cases is the reduction of the deformity. The foot must be brought to a right angle with the leg. The contractions at the knee and hip must be overcome and lateral distortion corrected. Slight Equinus may be overcome by forcible stretching of the tendo achilles, but resistant cases will require division of the tendon. This operation may be performed subcutaneously or by the open method. The former is preferred because of its simplicity and absolute safety. The field of operation is sterilized and the patient turned on his side or in the prone position with the heel upward. The tendon is put on the stretch so that its position and size may be ascertained.

A tenotome with its flat surface parallel to the tendon is passed beneath it until its point can be felt under the skin on the opposite side. The edge is then turned upward and the tendon divided, care being taken not to injure the skin. When division is complete, the knife is withdrawn and the pin point opening in the skin is covered with a piece of sterile gauze or cotton, after which a plaster paris dressing is applied with the foot held at right angle to the leg.

After 48 hours the patient is permitted to stand and walk on the foot, in fact he is encouraged to do so as functional use is an important factor in promoting firm and quick union. After the lapse of four weeks the plaster cast is removed and a brace worn to prevent recurrence of the deformity. Slight contraction at the knee and hip may be overcome by forcible stretching under an anesthetic and the application of a plaster cast. In severe cases, however, division of the tendons will be necessary. The tensor vagina femoris and adductor tendons may be divided subcutaneously, but division of the hamstring tendons should be done by the

open method, because of the danger of wounding the external popliteal nerve, which lies close to the inner side of the biceps tendon.

TENDON TRANSPLANTATION.

When one or more muscles are paralyzed the unbalanced action of the others tends to distort the limb. The object of tendon transplantation is to utilize the muscular power that is remaining to the best advantage. The operation should not be performed until every effort has been made to improve the nutrition and strength of the disabled muscles and the final degree of paralysis has been ascertained. As a rule, a period of at least two years should intervene between the onset of the paralysis and the time of operation. It is essential for the success of this operation to have a clear understanding of the deformity and the object to be attained. It will be of little use to transplant a muscle unless its origin is such that it can work to advantage at its new point of attachment. A few examples may be cited to show what may be accomplished:

If the tibialis anticus is paralyzed one may replace it by the extensor proprius hallucis or the perineus tertius may be divided and its proximal end attached to the tendon of the tibialis anticus or the periosteum on the inner border of the foot or to both. If on the other hand the perineus tertius is paralyzed, the tendon of the tibialis anticus may be divided and its proximal end inserted into the outer border of the foot.

Paralysis of the tibialis posticus may be treated by dividing the perineus brevis below the external malleolus and attaching the proximal end to the former muscle. If the calf muscles are paralyzed the tendons of the perineus longus and brevis may be inserted into the tendo achilles. Other operations will suggest themselves. For instance the sartorius and the tensor vagina femoris may be transplanted into the

quadriceps and the trapezius may be transplanted into the deltoid.

The Operation: All contractions must be overcome by tenotomy and stretching before attempting the operation. Having applied an esmarch bandage, one or more incisions are made, exposing the field of operation.

The tendon to be transplanted is then separated from its attachment and all restriction having been removed, it is placed in apposition to the paralyzed tendon and sutured to it with silk.

When there is severe deformity and considerable atrophy of the paralyzed tendons the healthy tendon should be inserted into the periosteum or into the bone itself. If one is unable to reach the desired point of insertion because of the contraction of the healthy tendon the intervening space may be bridged over with strands of heavy silk after the method of Lange.

The silk ultimately is absorbed and is replaced with fibrous tissue, thus forming new tendon.

ARTHRODESIS: or the induction of ankylosis may be combined with tendon transplantation to advantage in many cases. The operation consists of opening the joint and removing a section of cartilage from its opposed surfaces which are then brought together and fixed with sutures. In simple Calcaneus or Equinus the ankle joint may be opened preferably from in front. An incision about two inches in length is made over the dorsum of the foot which is then planterflexed and the cartilage removed from both surfaces of the joint.

When there is complete paralysis of the extensors, arthrodesis at the ankle joint may not be sufficient to hold the foot at right angle and therefore the medio-tarsal joint should be similarly treated and the tendons of the paralyzed muscles shortened to hold the foot in the correct position. In severe Calcaneo-valgus, which is the most disabling of all deformities, the operations

of tendon transplantation and arthrodesis should be combined with astragaleectomy for greater stability of the foot.
NERVE ANASTAMOSIS OR NERVE

GRAFTING.

The results expected from this operation have not been realized. The earlier operations gave promise of wonderful possibilities through the grafting of a paralyzed nerve into a healthy one or vice versa, but so many failures have occurred that it is no longer to be rec-

ommended to patients. In the cases reported as favorable it is hard to determine whether the improvement was due to Neuroplasty or to natural causes. It is possible, however, that with the selection of suitable cases, improvement in technique, and a better knowledge of the minute anatomy and physiology of the nerve fibres to be transplanted, much better results may be looked for in the future.

*Wright, W. G., B. M. & S. G., Oct., 1912.

CONSERVATIVE PELVIC SURGERY.

BY W. O. HENRY, M.D., FORMERLY PROFESSOR GYNECOLOGY IN THE MEDICAL DEPARTMENT OF CREIGHTON UNIVERSITY; GYNECOLOGIST TO THE ST. JOSEPH AND DOUGLAS COUNTY HOSPITALS; SURGEON TO THE PRESBYTERIAN AND OMAHA GENERAL HOSPITALS, OMAHA; NOW OF LOS ANGELES, 521 AUDITORIUM BUILDING.

So much work is now being done upon the pelvic viscera in women, and the technic is so greatly changed from what it was years ago, and the tendency of late years is so much more radical in some directions than formerly, and certain operations are necessarily so much more mutilating than was at one time thought permissible, that it would seem to be wise to stop a moment and consider our work and determine just what conservative work really is, and what work must, in the very nature of the case, be more or less mutilating.

Unless we can agree more closely upon the proper definition of these terms than the many writers who recently undertook in the Medical Review of Reviews to define "Medical Efficiency," I fear we will not arrive at legitimate conclusions on this subject. Though they differed so widely it seemed to me that the following ought to be a correct answer: Medical efficiency is the successful application of medical science to the prevention, relief and cure of malformations, injuries and diseases of the human body; or to the postponement of death from any of

these conditions. Now if we agree upon that definition, it will be easier to agree upon the next.

According to the dictionary, conservative means "having power to preserve in a safe or entire state, or from loss, waste or injury; preservative."

So that we may properly then define conservative pelvic surgery as that which restores the pelvic tissues, organs or parts to as nearly a normal condition as is consistent with the life, health and comfort of the patient. It seems to me that this definition is very important, for unless we can have a common understanding as to what we mean by the term we shall never be able to see alike upon the further discussion of the subject. In fact, unless we have the same goal, standard or mark, we cannot expect to agree in procedure, or plans.

The medical profession today as never before is endeavoring to prevent both suffering and disease, and because of its wider knowledge, its deeper insight and its greater power, its work is more efficient than ever before. And therefore we do well to consider and

see whether or not we are as a profession coming up to this standard of **conservatism** in our work in the female pelvis.

Please remember that conservative work does not simply mean getting rid of your patient's suffering, for she might be rid of this even if her treatment resulted in death. Neither does it mean merely making her feel well, for she might do that even after ablation of perfectly well and healthy organs. On the other hand it does mean doing all that is necessary, and no more, to relieve the patient's suffering, disease or ailment, and restoring her to her normal condition in all her pelvic parts as nearly as possible consistent with giving her life and health.

To illustrate my point take the following cases:

No. 1 Mrs. D., aged 26 years, mother of one child four years old, since which time she has had two miscarriages for some cause unknown to herself, and now she comes to find out why she cannot carry her pregnancy through to term. She tells me she had a hard time with her childbirth, and was torn, and that later her doctor repaired the tear in the cervix, took out her appendix and the right tube and ovary without her consent.

Examination revealed the fact that he had amputated her cervix very high up, which in my opinion prevented her carrying her pregnancy on to term. Now I am fully persuaded that we ought to insist upon the proper repair of a lacerated cervix as a preventive of other serious troubles which may follow a neglected tear, chief of which is carcinoma. To properly repair this laceration means restoring the parts to as nearly a normal condition as possible, and it does not usually mean an amputation. No stump thus left is equal to or nearly as good as the normal cervix, and it does thus interfere with the normal processes of nature, particularly pregnancy and childbirth. We are not

doing conservative work unless we have the lacerations repaired so as to avoid or prevent the development of carcinoma, which may destroy the patient's life, and we are not doing conservative work unless we repair it in the way that will give the best permanent results for future use and health. Knowing as we do how many of these cases are entirely neglected, and how very many go on to the development of malignancy, and to the loss of lives, we must admit that many physicians are not alive to the importance of this particular conservative work, and we ought in every possible way, through college work, the journals, and by circulars to the whole medical profession, educate and agitate along these lines until every medical man at least does his full duty by this class of patients.

No. 2. Mrs. G., aged 35, with carcinoma of the cervix. A Schroeder operation was done, that is the cervix was amputated high up, and the patient made a rapid recovery. Soon, however, the disease returned in the body which was left, and in the broad ligaments and upper vagina, and of course nothing more for permanent relief could now be done. I am very well aware of the fact that this operation for this special trouble has long been advocated, and no less an authority than McNoughton Jones in one of his recent books has advocated it as being proper and adequate. However, I for one cannot consider this a sufficiently radical operation for cancer of the cervix for the very reason that your operation does not go wide enough of the growth, and you are almost certain in a short time to have a recurrence, and when you do, your patient's doom is sealed and a few short months will see the end. So that the Schroeder operation for cancer of the cervix is not **conservative** because it is not **radical enough**. In all of these cases I believe we are bound, in justice to our patients, to do a complete hysterectomy in order to be truly

conservative, and make our work tally with the standard set up in our definition.

On the other hand I do not favor the Wertheim operation in such cases for two very good reasons. First, the operation is too dangerous, and the mortality too high at the present time to justify its performance. Second, it is not yet certain that any case has been permanently cured by this very severe operation which might not have been cured by the less serious and very effective pan-hysterectomy. So that this operation is too radical to be really conservative.

In all of these cases the two important things in my judgment for conservative work are, first, early diagnosis, and second, wide and complete hysterectomy.

No. 3. Mrs. A., about 30 years of age, had a small pus tube on right side with adherent tube and ovary in the cul-de-sac. While East this winter I saw a well-known operator open the abdomen in this case and after a little exploration, he turned to the physician standing next to me, who had brought the case in for a private operation and said to him, "I think, doctor, we must remove everything here." To which the family physician responded, "Oh, doctor, don't do it unless you have to, for they are very much opposed to so radical an operation." After a few more manipulations the operator again turned to him and said, "Well, it must be done, there is no other way out of it. Go out and tell the husband." He then proceeded to open up the broad ligament and do a wide dissection, taking out uterine tubes and ovaries, leaving almost the whole interior of the pelvis raw, and then to protect this denuded angry surface from becoming adherent to fresh bowel or omentum, he closed off the pelvic cavity from the abdominal by stitching a loop of the sigmoid across the brim of the pelvis, which latter he did very nicely. But

what was all this wide preliminary work for? Simply to get rid of a small pus tube and an adherent tube and ovary, which could have been done and is done perfectly well every day by operators of no particular reputation, where the uterus is left intact, the other tube and ovary allowed to remain and functionate in a normal way, and pregnancy with satisfactory delivery to afterwards occur. In fact here was a wide, mutilating, extremely radical operation done for no justifiable reason whatever.

Knowing the reputation and ability of this operator, I could hardly have believed he would do such work, unless I had seen it with my own eyes, and also talked with the family physician who brought the patient in for operation. Now if this patient got well from this operation, which I doubt, she will be only in moderate health, and never be what she might have been by a truly conservative operation. So that I have no hesitation in saying this was a radical and wholly unjustifiable operation, because it was not indicated nor needed, and because the woman could have been left in better health and a more nearly normal condition by less work, and finally because it was a much more dangerous operation than was necessary.

Case 4. Mrs. B., aged 42, mother of two grown children, operated on by a well-known surgeon, for some uterine displacement and ovarian trouble on the right side. Tube and ovary were removed, and the uterus was sewed to the anterior abdominal wall. Patient now suffered from indigestion, pain in lower abdomen, gas in bowels, and frequent urination, so that she feels in worse condition than before the operation, and will never be well until this dense adhesion is loosened and the uterus at least set free and either removed or suspended in a more natural way.

I think we cannot too strongly emphasize the fact that now we are in

better position than ever before to avoid these fixation operations, and that they should therefore never be done. For some years I have not done a ventro-fixation, nor even a ventro-suspension, for they are too frequently followed by dire results, either obstruction or strangulation of the bowels or less serious, but still very objectionable and painful symptoms. I have had to operate several cases of this kind simply to give patients relief from such conditions. I am very well aware of the fact that these operations have been standard and generally accepted as proper until very recent years, yet I confess I am at a loss to know how the profession was ever misled into doing an operation so devoid of merit, so unscientific, and so full of danger. It never was truly conservative work and is less so today than ever. Certainly no work in the pelvis can be considered conservative which leaves conditions as bad as, or worse, than they were before. The operations must produce results approaching the normal conditions, not substituting one bad condition for another. When through with your operation and nature has finished her part following your operation, the condition in the pelvis should be more nearly normal than when you began. You should have removed all that may have been inimical to the patient's life and health, with the least possible danger to either and with the loss of the least amount of tissue or organ commensurate with the above result, leaving all remaining parts as nearly normal as can be done.

Case 5. Mrs P., aged 28 years, married six years and never pregnant, but both she and her husband were very anxious for children. She had grown very nervous since marriage, had painful menstruation, headaches, some pain and tenderness in lower abdomen, was troubled with constipation and tympanites. Examination revealed an endometritis, tender ovaries, enlarged and ad-

herent tubes. After explaining conditions to both, an operation was done in which the tube and ovary most seriously involved were removed. The other tube and ovary were loosened from their adhesions, the tube was resected, leaving an open patulous end, so that the pelvis was as nearly cleared of all irreparable diseased conditions as possible, leaving a crippled ovary and tube, with the hope of repair and a future pregnancy. The patient made a very satisfactory recovery, and eighteen months later gave birth to a fine girl baby, much to their delight and comfort, also to the improvement of her general physical condition. It is very important for us to remember that nature is a wonderful restorative and can heal many cases which at first seem beyond repair, and therefore we must not be overzealous in these young women, especially about cutting away organs or parts of organs, merely because they are seriously impaired by inflammatory exudates.

Case 6. Miss F., aged 24, had just recovered from a gonorrhoeal vaginitis and endometritis which had resulted in a large pus tube, when she insisted upon marrying the man to whom she was engaged. I warned her of the dangers and doubted if she would ever become pregnant. But as she had been engaged for some time, and the wedding day had arrived, there was nothing for me to do but give her the necessary warning and let her take the consequences. Within a year and a half they had a fine boy, and she never had any trouble either before she conceived or during her puerperium. Evidently nature had been very good to her and had eliminated the malady before she became pregnant, and for this reason no difficulty developed as one might expect.

Therefore I say do not underestimate the power of nature's resources in these inflammatory conditions in the pelvis.

Case 7. Mrs R., aged 26, gave birth to a fine baby about two years after I had drained through the vagina a large tubal abscess (probably gonorrhoeal). Here the woman had gotten real well of her abscess and married, became pregnant, gave birth to a perfectly healthy child and was easily delivered by her family physician. However she developed puerperal sepsis for which I was called in consultation, and felt then, as I do now, that probably her infection was due to the latent results of her previous tubal trouble. Of this I could not be certain, but am glad to say under treatment she came out all right and made a good recovery. Here there must have been a crippled tube and ovary with more or less resulting adhesions, but through nature's healing and absorption process so nearly was the recovery complete and perfect that she was able to become a mother with no more difficulty than some women have who have never had any previous pelvic infection.

In the year 1906 it was my privilege to read a paper before the American Medical Association at its meeting in Boston upon the subject, "To what extent can the Gynecologist prevent and cure Insanity in Women?" At that time I took occasion to report twenty-eight cases in full, and I showed that sixteen of these, or more than 50% were perfectly cured both physically and mentally, and all others, except one which died shortly after the operation, were distinctly improved by the operative procedures.

I was obliged at that time to criticize rather severely the work of some men who were doing work in the pelvis to correct or help in restoring the mentally unbalanced women who came under their care, because they reported somewhat adversely to the benefits to be derived from gynecological operations.

I went carefully into the detailed reports of cases as given by Le Roy Brun, and showed, as I thought, how

his work was not conservative because it was not radical enough, and therefore his patients seldom got the relief which might have been given them. In other words, while he recognized the diseased pelvic conditions and operated upon them, he did not remove all the sources of pelvic disturbance, or he substituted what he thought was a minor for a major difficulty, and thus did not fulfill the conditions required to do either a successful or truly conservative operation in these cases. In concluding that paper I said "I wish, then, to conclude my paper by insisting that the gynecologist can prevent the occurrence of insanity in many women with very unstable nervous organization if he will, by treatment or operation, remove all pelvic irritation; and, again, he may cure various forms of insanity in women if such irritation is entirely removed, and it is important not to substitute a lesser form of irritation in getting rid of the more serious one. Conservative treatment and operations are all right, if they really secure complete removal of all pelvic irritation; but to get all the results we have a right to expect from gynecology, and which we can undoubtedly secure in a very large proportion of cases, we must wholly eradicate the pelvic irritation by whatever means are necessary, no matter how radical the work required."

And in closing the discussion which followed I said, "I was glad to hear the remarks of Drs. Manton and Lawrence, but my contention is that these pelvic diseases in women of unstable nervous organization are the particular thing that often upsets the mind, and the curing of these things before they have upset the mind will, in such cases, prevent the breakdown. So long as no one can tell what insanity really is, I think that practical experience in cases that are cured counts for more than anything else. When I have operated on cases and five or ten years later the patients are still well, that counts for

more than all the theory on earth. Of 28 cases I had 16 patients go home well. This is of real practical value. I do not claim that every insane woman can be cured by operation, but many can, and every insane woman should be given the benefit of all possible aid which can be afforded by the removal of all pelvic irritation. And finally, by curing these pelvic irritations in women of unstable nervous organizations, before insanity occurs, its development may often be wholly prevented."

Since that time I have carefully tried to differentiate my cases and the results, and the results in the cases operated have been fully as gratifying as before, and I can only emphasize by a wider experience what I then said.

At the Boston meeting, Dr. Manton, who for many years had been connected with the asylums of Michigan, took exception to my position, for in 1896 he had written a paper in which he said "We long ago came to the conclusion that the idea of restoring the sick mind to health as the result of gynecologic interference should be abandoned." But three years later see how he has changed, for then he read a paper before the same section of the American Medical Association in which he said "We know more at present than was formerly known, that, while mind may exert a remarkable influence over the functions of the various internal organs, the converse is also true, morbid state of any viscus often aggravating the existing mental malady, or even lead to the ultimate downfall of the greatest intellect. Head, in his Goulstonian Lectures for 1901, has shown that physical pain from visceral disease is pro-

ductive of decided psychic manifestations, and I and others have demonstrated that relief from suffering brings about a mental palliation often otherwise unattainable.

"It has been clearly shown that the hallucinations and delusions of the insane are not always the figment of a disordered brain, but are frequently dependent on intra-abdominal or pelvic lesions.

"If we also take cognizance of the disastrous effects of alcoholism, syphilis, tuberculosis and the strenuities of modern life, we have an alarming array of etiologic influences constantly threatening mental integrity. In the unstable individual slight causes may, perhaps, be quite sufficient to overcome the mental equilibrium.

"Hence the uterine, ovarian, or other diseases, through its newly acquired power of pain and its influence on the nutrition and functions of the body, becomes an important factor in producing mental depression.

"Such cases are particularly amenable to relief and cure through proper moral and physical treatment, supplemented by the surgical removal or correction of the local lesion. This also applies to instances of puerperal insanity the result of infection, inflammation or physical prostration from undue demands made upon the organism unequal to the strain."

Finally, then, let me say I believe all physicians should work for this kind of conservative pelvic surgery so far as they have any influence, and future generations will attest the correctness of our position, and we will rest content in the full assurance of duty performed and work well done.

ELEPHANTIASIS.*

REPORT OF CASE, BY HOMER C. OATMAN, M.D.

Mrs. C. R., aged thirty-three, married, two children. Family history negative. As a child lived in Colorado, at the age

of twenty-two married and moved to Arizona; lived there two years, then moved to Nevada, later coming to Cali-

*Case presented before the San Diego Medical Society March 17, 1914.

fornia. Lived several years in San Francisco, later in Los Angeles, about one and one-half years ago moved to San Diego. Has never lived in or visited the tropics. Always enjoyed the best of health with the exception of probably ambulatory type of typhoid at the age of twelve.

Seventeen years ago bruised her right leg over the middle third of the tibia. Quite marked swelling followed the injury, but subsided in a few days, and becoming apparently normal. About



one year afterward, while nursing a sister, and going up and down stairs frequently began to notice swelling at the point of injury. At this time she had pain, tenderness and redness. This condition lasted and was treated actively for about two weeks when the acute symptoms seemed to subside, but the enlargement never entirely disappeared.

During the third month of her last pregnancy, five years ago, a diffuse swelling began to take place over the

whole leg. During the next six months, or before her confinement, the circumference of the thigh was thirty-six inches (see cut). After delivery, during the two weeks' confinement to bed, swelling disappeared rapidly to such an extent that a shoe could be worn, but a few days, however, after being on her feet and moving around, the swelling reappeared and increased very rapidly. Rubber bandages and elastic hosiery were advised and worn day and night.

In March, 1912, I first saw her during one of the acute attacks, from which she has suffered frequently since. These attacks were marked by severe pain, marked hyperemia and local heat involving the whole leg to the trochanter, with a temperature of 106, following a severe chill. This in turn was followed by severe sweating.

These acute attacks continued at intervals of two or three weeks. In July, 1912, abscess developed in the region of the ankle, which opened spontaneously and discharged a large quantity of pus. The patient was taken to the hospital in October, and on November 17th, large wedge-shaped pieces of pendulous portions of lower leg were removed, and again on November 30th, the same kind of operation was done on the thigh. Healing was very rapid, showing no tendency to suppuration, in fact the resistance to infection seemed rather above normal. From each of the scars, a discharge of lymph has continued more or less until the present time. Her acute attacks remain about the same with about the same frequency.

The patient was taken to the hospital again on March—March 12th, 1914. March 14th an amputation at the hip-joint was done.

The case is interesting in several points. The probable traumatic origin of a typical elephantiasis—also that careful microscopic examinations made

of the blood taken during the night has failed to show any parasites. For the careful attention paid to this case during the months of observation, and for valuable suggestions in regard to treatment, I am very much indebted to

Dr. Banks; for the pathological examination and suggestions to Dr. Thompson, and for assistance at the operation Dr. Harding, Dr. Thornton and Dr. Long.

Watts Bldg., San Diego.

CONGENITAL PYLORIC STENOSIS.*

REPORT OF CASE BY HOMER C. OATMAN, M.D., SAN DIEGO.

R. H., male, age 1 month and 6 days, patient of Dr. A. E. Banks, was first seen by him Jan. 21st, 1914, on account of persistent vomiting, which had commenced on the 21st day after birth. Baby was breast fed up to this time. No modification of milk proved satisfactory and the true cause of food rejection was recognized, for the following reasons:

The amount returned approximated the amount ingested.

Vomiting was projectile, apparently without nausea, and contained no bile.

Constipation was obstinate.

Peristaltic waves were marked over epigastrium.

Small tumor mass palpable at site of pylorus.

Progressive emaciation present.

The child was really hungry and nursed well.

I was called in consultation on the 6th of Feb., and confirmed the diagnosis of Congenital Pyloric Stenosis, and on the 7th did a pyloroplasty of the type of the Finney operation, assisted by Dr. Banks, chloroform anaesthesia by Dr. Thompson.

At operation we found a well marked enlargement of the pylorus, of fibrous like density, very resistant, and with no discernible lumen.

Recovery was uneventful. There was no post-operative vomiting. Rectal alimmentation was employed for 48 hours, then nursing of small but cautiously increased quantities of modified milk.

Baby weighed at birth, 8¾ pounds.

At 4 weeks, 10 pounds.

At operation, 7 pounds.

One week after, 8 lbs. 2 ounces.

March 14, 10½ pounds.

*Presented before San Diego County Medical Society March 17, 1914.

RESOLUTIONS ENDORSING THE SHAFROTH-CALLOWAY BILL, HOUSE BILL NO. 12,864, SENATE BILL NO. 4370, ADOPTED BY THE LOS ANGELES SOCIETY FOR THE STUDY AND PREVENTION OF TUBERCULOSIS.

A resolution declaring the care of tuberculous strangers in the Southwest to be an interstate problem, and calling upon the Federal Government to convert abandoned forts and military reservations in the Southwest into Tuberculosis Sanatoria.

Whereas, for many years consumptives have been coming to Southwest-

ern States because of the superior advantages of climate for the treatment of this disease; and

Whereas, there are not a sufficient number of State, County and City hospitals in the Southwest to maintain the large number of persons from other States who apply for free treatment,

and the public charitable organizations of the Southwest cannot care for all such applicants; and

Whereas, the States, Counties and Cities from which these people come and where they contracted their disease have not aided and will not aid them; and

Whereas, the people of the Southwest are becoming infected with tuberculosis, spread by the careless and ignorant consumptive strangers notwithstanding the fact that natural conditions are unfavorable to the development of tuberculosis;

Therefore we, the Directors of the Los Angeles Society for the Study and Prevention of Tuberculosis, hereby

Declare, that the care of consumptives in the Southwest is an interstate problem and that it is the duty of the Federal Government to take action to provide hospital care for citizens suffering from consumption who have left their native States and are residing in the Southwest seeking health, and who are unable to pay for hospital care, and we call attention to the fact that precedent has been established for such action by the establishment and operation of the Fort Bayard Hospital for soldiers and ex-soldiers, and the Fort Stanton Hospital for marines, sailors and steamboat men, and the Las Animas Hospital for the United States Navy.

Resolved, that State Legislatures, County Commissioners, Municipal Assemblies, business and civic organizations, corporations, firms and individuals are hereby petitioned to contribute to the fund to secure action by the United States Government, and be it further

Resolved, that the National Association for the Study and Prevention of Tuberculosis and all similar National, State and City organizations are hereby petitioned to aid in securing the pas-

sage of legislation prepared by the Committee of Ninety-Nine, and be it further

Resolved, that we endorse the Shafroth-Calloway Bill, House Bill No. 12,864, Senate Bill No. 4370, and ask all interested in the prevention of tuberculosis to write to the United States Senators and Congressmen, and urge them to endorse this bill.

GEORGE H. KRESS, President.

GEORGE E. MALSBARY, Secretary.

The following are the United States Senators and Congressmen from this State, with their Washington, D. C., addresses:

SENATORS:

Geo. C. Perkins, Stoneleigh Court.

John D. Works, The Kenesaw.

CONGRESSMEN:

Chas. W. Bell, The Cairo.

Chas. F. Curry, 1504 21st St.

Julius Kahn, The Brunswick.

Wm. Kent, 1925 F St.

Wm. Kettner, Congress Hall.

Joseph R. Knowland, 1712 H St.

John I. Nolan, New Bloomfield.

John E. Raker, 2034 Columbia Rd.

Wm. D. Stephens, Congress Hall.

THE SHAFROTH-CALLOWAY BILL, HOUSE BILL NO. 12,864, SEN- ATE BILL NO. 4370.

To provide for investigations of tuberculosis and the prevention of the disease by care of consumptives in hospitals and providing for the use of abandoned military, naval, and other reservations or other Government property as tuberculosis hospitals and providing for the maintenance of such institutions.

Be it enacted by the Senate, and House of Representatives of the United States of America in Congress assembled, That the Surgeon-General of the Public Health Service shall cause an

inspection to be made of military, naval and other reservations located in the West and Southwest which are no longer used for military or other purposes, and any such reservations and other property which the Secretary of War, the Secretary of the Navy, the Secretary of the Interior, or the Secretary of Agriculture may recommend to be abandoned and any other Government property which may be available for the purposes of this Act, and shall cause to be prepared a report and recommendations to the Secretary of the Treasury as to the adaptability of such military or other reservations or other property as tuberculosis hospitals.

Sec. 2. That the Secretary of the Treasury shall then, or later, designate for use as tuberculosis hospitals under the direction of the Public Health Service two or more of such military or other reservations or other property which have been recommended by the Surgeon-General. The Secretary of War, the Secretary of the Navy, the Secretary of the Interior, or the Secretary of Agriculture, as the case may be, is authorized to transfer to the Secretary of the Treasury any abandoned military, naval or other reservations or other Government property suitable for use as tuberculosis hospitals, or as much thereof as may be necessary, with all buildings and improvements thereon, to be used for the purposes of this Act.

Sec. 3. That the Secretary of the Treasury be, and he is hereby, authorized to cause the repair and reconstruction of existing buildings and the erection of suitable and necessary buildings upon such military or other reservations and other Government property, for the purposes of this Act, at a cost not to exceed the sums herein appropriated for this purpose.

Sec. 4. That there may be admitted to the Fort Stanton Tuberculosis Hospital, under the provisions of this Act,

such consumptives as are indigent and have contracted their infection in another State and who, by reason of their affliction, are a menace to interstate commerce, and the Secretary of the Treasury shall cause to be erected the necessary buildings for their care and treatment, at a cost not to exceed the sums herein appropriated for this purpose.

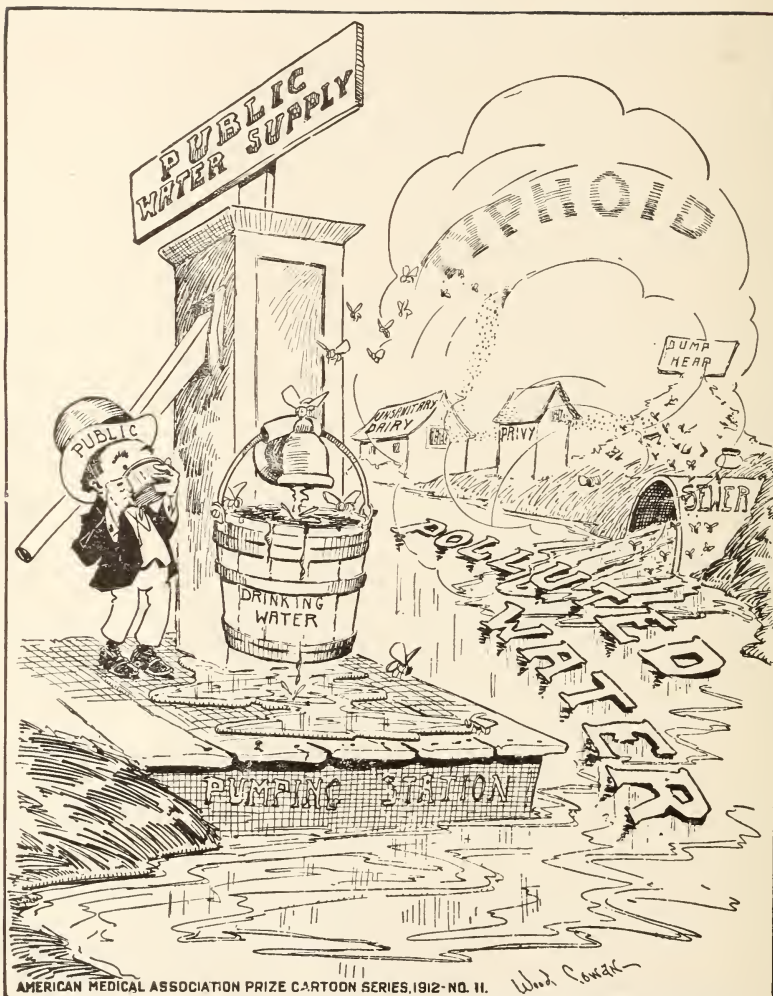
Sec. 5. That the sum of \$250,000, or so much thereof as may be necessary, is hereby appropriated, from any money in the Treasury not otherwise appropriated, for the repair and reconstruction of existing buildings and the erection of necessary buildings and the equipment thereof, and \$50,000, or so much thereof as may be necessary, for maintenance, including pay of personnel, during the fiscal year ending June thirtieth, nineteen hundred and fifteen.

Sec. 6. That for the purposes of this Act the Surgeon-General, through his accredited agent, is authorized to receive at such hospitals under the rules and regulations provided for in section seven of this Act such patients afflicted with communicable tuberculosis, as are indigent and have contracted their infection in another State, and who by reason of their affliction are a menace to interstate commerce.

Sec. 7. That the Secretary of the Treasury may make and issue such regulations as may be deemed necessary for the administration and government of the tuberculosis hospitals and for the admission of patients to such hospitals.

Sec. 8. That the Surgeon-General of the Public Health Service of the United States is authorized to detail or appoint for investigations of tuberculosis and the treatment of patients at the tuberculosis hospitals such medical officers, acting assistant surgeons, pharmacists, and employees as may be necessary for the purpose.





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EDITORIAL

CHILD SUICIDE IN GERMANY.

The Medical Record says during 1905 there were in Prussia 603 suicides of persons under twenty years of age. Of these, 403 were males, and 200 were females. Although figures are not at hand since 1905, yet it is believed that child suicide is steadily increasing; in fact, Dr. Fritz Berlozheimer said in 1910, that in recent years the number of suicides in school children had increased "in a degree that could only be called uncanny." One of the chief reasons is believed to be: The spirit of the school in Germany is not free enough and there is not enough comradeship between master and scholar. In the schools, as in every other sphere of political, social, and administrative activity, the German-Prussian system is peculiarly liable to the injurious discipline of repression which, instead of implanting manliness and strength of character in the young scholar, as some old-time German theorists imagine, is the deadliest foe to the development of

a robust will and self-expression.

The tendency of all public schools is toward the production of the stereotyped average and the repression of individuality. In the United States public school system, great effort is being made to overcome this and give every pupil opportunity to develop the talent that heredity has given him. The very fact that child suicide in America is rare, proves that we are to some extent succeeding. We all acknowledge there is still great room for improvement along this line right here at home.

DR. JOHN R. WHITESIDE.

Dr. John Rowland Whiteside was born at Troy, Ill., in 1851, and was educated at the University of Chicago and took his Medical Course at St. Louis Medical College, where he came under the influence of the late John T. Hodgen, one of the foremost surgeons and teachers of his day, and from whence

he graduated in 1875. He later took a post-graduate course at Rush Medical College, and practiced in St. Louis until 1877. Dr. Whiteside came to Arizona in 1898, and practiced Medicine in Mohave County, from 1903 to the time of his death. He was the most public spirited citizen of Mohave County, and in his capacity of State Senator drafted and had passed through the Legislature, in the face of strenuous opposition, the best Medical Act of any in the United States.

He was the first President of the Mohave County Medical Society and held, at the time of his death, the appointments of County Superintendent of Health; Councillor to Arizona Medical Association; Surgeon to the Gold Road Mines and to the Santa Fe Railway, and President of the National Highways Association.

Dr. Whiteside died at Albuquerque, N. M., March 6th, and was buried at Kingman, Arizona, March 10th, the services being conducted by the Masonic Order.

WARNING TO USERS OF TURPENTINE FOR MEDICAL OR VETERINARY PURPOSES.

Users of This Substance Cautioned to Make Certain That It Is Not Adulterated.

As the result of an investigation by the U. S. Department of Agriculture, it has been found that the adulteration of turpentine with mineral oils is so widespread that druggists and manufacturers of pharmaceutical products and grocers' sundries used for medicinal and veterinary purposes should exercise special caution in purchasing turpentine. Those who use turpentine for this purpose, unless they are careful, run the risk of obtaining an adulterated article and unnecessarily laying themselves open to prosecution under the Food and Drugs Act.

It has been found, moreover, that

the turpentine sold to the country stores especially, as usually put out by dealers and manufacturers of grocers' sundries, is often short in volume by as much as 5 or 10 per cent. Dealers therefore, should also protect themselves through a guarantee from the wholesaler that the bottle contains the full declared volume.

The Department has found that turpentine may be adulterated in the South where it is made and that the further it gets from the South the more extensively and heavily it is adulterated.

In all cases, druggists, manufacturers and wholesale grocers should satisfy themselves that the turpentine is free from adulteration and is true to marked volume.

S. WEIR MITCHELL.

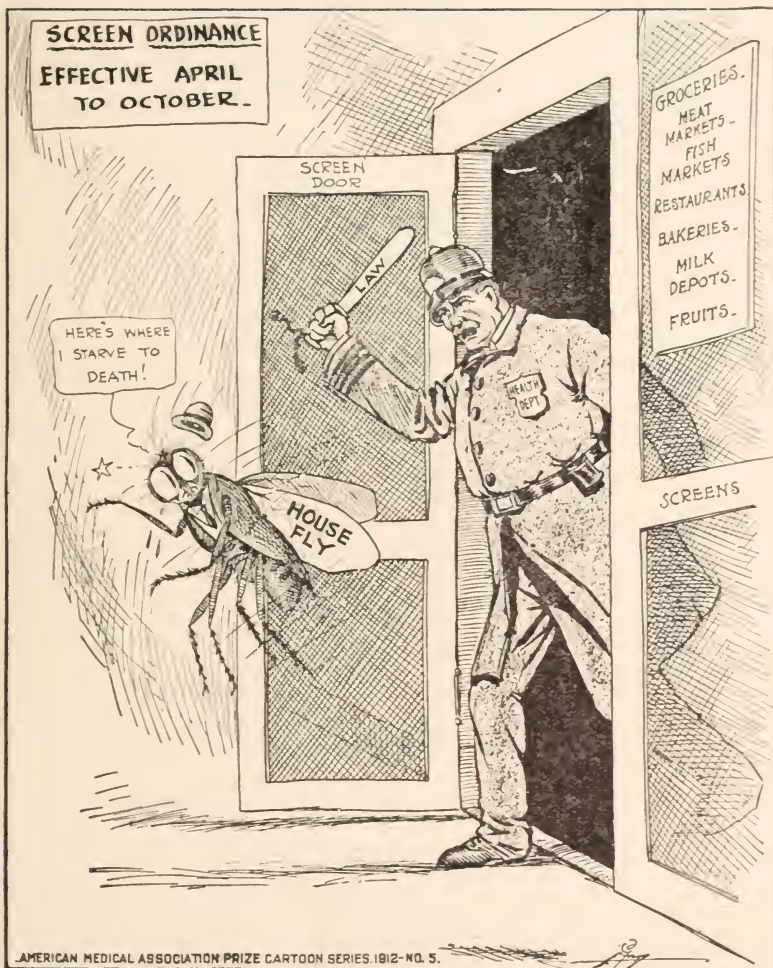
The College of Physicians of Philadelphia, the American Philosophical Society, the University of Pennsylvania, the Library Company of Philadelphia, the Jefferson Medical College and the Academy of Natural Sciences joined with the many friends of S. Weir Mitchell in a memorial meeting in the Hall of the College of Physicians, Tuesday evening, March 31, 1914. Dr. James C. Wilson, President of the College of Physicians, presided. Addresses were delivered by Dr. Talcott Williams of Columbia University, Dr. William H. Welch of Johns Hopkins University, and Mr. Owen Wister of Philadelphia. The world has produced but one S. Weir Mitchell. Such characters are an inspiration to their generation and those that follow.

At a recent meeting of the Tri-State Medical Society of the Carolinas and Virginia, Dr. E. C. Register, who has been editor of the well-known Charlotte Medical Journal for twenty-five years, was elected president.



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES 1912-NO. 4.

Who Says "DON'T"?



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES 1912-NO. 5.

HIS DEATH OR YOURS!

EDITORIAL NOTES

Dr. Norman Bridge, who has been quite ill has entirely recovered.

Dr. Woods Hutchinson has been spending a few weeks with friends in Southern California.

Seattle, Washington, had rainfall as follows: 1911, 21.69 inches; 1912, 35.14 inches; 1913, 24.15 inches.

Raisin Day, Thursday, April thirtieth, every physician should encourage consumption of California raisins.

Dr. H. S. Brainerd is spending a few months abroad. His address is care Thomas Cooke and Sons, Vienna, Austria.

Dr. Charles Eaton Phillips, formerly of Colon Hospital, Canal Zone, Panama, now has offices in the Wright and Callender Building Los Angeles.

Dr. Ernest Bryant Hoag has taken offices in the Fay Building, Los Angeles.

Drs. Leonard Stovell and Claudius Ballard have taken offices at 1201 1-2 Central Avenue, Los Angeles.

Dr. Charles Eaton Phillips, formerly Chief of the Surgical Clinic, Colon Hospital, Canal Zone, Panama, has opened an office in the Wright and Callender Building, Los Angeles.

For sale. Four (4) K. W. Snook X-Ray apparatus for Direct Current, very cheap. Reason for selling is inability to get direct current. Good as new. Address No. 44, care of Southern California Practitioner.

Graduate and registered nurse, who has had three years' experience as office nurse and assistant, wishes position. Have good recommendations and will gladly call at office, if desired. Address No. 45, care of the Southern California Practitioner.

William M. Radcliffe, M. D., Jefferson '89, licensed in California, desires to do substitute work for physicians at any time during vacation, absence, or illness, by the day, week or month, references given. Address Dr. William M. Radcliffe, 901 1-2 Vermont Avenue, Los Angeles, California. Phone Wilshire 205 or 202.

The Socialists and Labor Unionists of the Ninth Senatorial District comprising Contra Costa and Marin Counties tried on March thirty-first to recall State Senator James C. Owens, because he voted against the forty-eight hours per week bill for student nurses and other similar bills. They were defeated in their efforts and Senator Owens is still Senator.

Dr. J. A. Colliver of Los Angeles, formerly Secretary of the Southern California Medical Society, who left Los Angeles last July, has been doing special work in Pediatrics in London, Munich and Paris, is now spending a few months in Prof. Pirquet's Children's Hospital in Vienna. He will return to Los Angeles in July, 1915. Dr. Colliver writes that Dr. Egon, professor of surgery in Vienna, will be in Los Angeles between the 1st and 5th of May. "The professor goes to America to give a paper before the American Surgical Society and also one before the International Surgical Congress. In addition to this he is on his honeymoon. He lately married Prof. Pirquet's sister." Dr. Colliver's address is 9-2 Lazarettgasse, Vienna.

The volume of the saline matter in the ocean is a little more than 4,800,000 cubic miles, or enough to cover the entire surface of the United States, exclusive of Alaska, 1.6 miles deep.

BOOK REVIEWS

THE CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume III, Number 1. Octavo of 190 pages, 91 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Published bi-monthly. Price per year: Paper, \$8; cloth, \$12.

This number contains cases that were shown in connection with the clinics held during the Clinical Congress of Surgeons last November. Beginning with the April issue, each issue of the Clinics will contain a talk by Dr. Murphy on surgical diagnosis.

A MANUAL OF CLINICAL DIAGNOSIS BY MEANS OF LABORATORY METHODS. For students, hospital physicians and practitioners. By Charles E. Simon, M.D., Professor of Clinical Pathology and Experimental Medicine in the College of Physicians and Surgeons, Baltimore. Eighth edition, enlarged and thoroughly revised. Octavo, 809 pages, with 185 engravings and 25 plates. Cloth, \$5 net. Lea & Febiger, Philadelphia and New York, 1914.

This is generally recognized as a leading work on Clinical Diagnosis, as is shown by the demand which has carried it to its eighth edition. In this edition will be found the advances which the last two years have brought forth. The account of the diagnostic methods based upon the appearance of the protective ferments of Abderhalden in the blood is up to date, a trustworthy guide for those who would venture into the attractive field of "organ diagnosis." Much of the technique in connection with the Wassermann reaction has been rewritten. The complement fixation test in latent gonococcus infections has been embodied in the present edition and should prove useful in many cases. The more modern methods of investigating the existence and extent of renal disease have been carefully considered, and should receive the attention of both the general practitioner and the laboratory worker. A very excellent and practical feature will be found in the second part of the volume,

entitled "The Essential Factors in the Laboratory Diagnosis of Various Diseases." This section of 250 pages is devoted to the application of laboratory findings to diagnosis; and under the various diseases, which are alphabetically arranged, are given the essential points of diagnostic significance. Simon's Clinical Diagnosis is a work of which Americans may well be proud.

We note the following concerning the Abderhalden reaction: As a result of the study of some 2000 cases by various observers we may conclude that the reaction is specific, providing that the technique of Abderhalden is followed in every detail. It usually appears during the first month and persists until the end of the third week following delivery. It is also present in cases of extra-uterine pregnancy. The reaction depends upon the presence in the blood as a result of pregnancy, of ferments which exert a proteolytic action upon placental proteins.

SPECIFIC DIAGNOSIS AND SPECIFIC MEDICATION. By William Fyfe, M.D., formerly Professor of Specific Medication in the Eclectic Medical College of the City of New York; author of the "Essentials of Modern Materia Medica and Therapeutics." A thorough work on specific medication by the late John M. Scudder, M.D. Second edition. John K. Scudder, Publisher, Cincinnati, O., 1914.

This is virtually a modern amplification of Scudder's "Specific Diagnosis" and "Specific Medication." Some of the statements are rather striking. The following is taken from the Introduction: "The physician who practices specific medication should exercise great care in making a diagnosis. When called to a patient he should first carefully and correctly diagnose the case in accordance with the nosology now accepted by all scientific physicians. He should do this for the benefit of medical science, and also for his own personal benefit. A single mistake in this

form of diagnosis may prove extremely detrimental to the reputation of the physician making it. Such diagnosis, however, should have but little influence in the treatment of the patient. This should be governed entirely by the symptoms or disease expressions."

We are glad to see this work appear since it practically brings Eclecticism up to date.

ANATOMY AND PHYSIOLOGY — A TEXT-BOOK FOR NURSES. By John Forsyth Little, M.D., Assistant Demonstrator of Anatomy, Jefferson Medical College, Philadelphia. 12mo., 483 pages, with 149 engravings and 4 plates. Cloth, \$1.75 net. The Nurses' Text-Book Series. Lea & Febiger, publishers, Philadelphia and New York, 1914.

In this volume the author presents the essentials of anatomy and physiology in a clear and untechnical manner. It is a book well adapted to the needs of the student nurse.

DIAGNOSTIC METHODS. A Guide for History Taking, Making of Routine Physical Examinations and the Usual Laboratory Tests Necessary for Students in Clinical Pathology, Hospital Internes, and Practicing Physicians. By Herbert Thomas Brooks, S.B., M.D., Professor of Pathology, University of Tennessee, College of Medicine, Memphis, Tennessee. Second edition, revised and rewritten. St. Louis, C. V. Mosby Company, 1914. Price \$1.

This little book is intended for medical students, hospital internes and physicians who have a limited amount of time to give to laboratory work.

INFECTIONS OF THE HAND. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand and Forearm. By Allen B. Kanavel, M.D., Assistant Professor of Surgery, Northwestern University Medical School, Chicago. New (second) edition, thoroughly revised. Octavo, 463 pages, with 147 illustrations. Cloth, \$3.75 net. Lea & Febiger, Philadelphia and New York, 1914.

This is undoubtedly one of the most valuable and practical books which the physician could place in his library. The frequency of injuries to the hand, the disastrous results which may occur, and the importance of proper treatment are well known. Dr. Kanavel has made

a special study of this field, and has obtained remarkable results; and his book is the only one in existence which covers its subject fully and exclusively. It is the result of several years' work, comprising experimental and anatomical investigations carried on in conjunction with careful clinical observation of an extensive number of cases. By the use of the measures described in this volume it has been possible, even in neglected cases, to insure a restoration to complete function in 95 per cent of the abscesses of the fascial spaces; while in tendon-sheath infections the morbidity has been reduced fully one-half, and the usefulness of many a hand that is now lost might be preserved if every practitioner and surgeon were equipped with the information set forth by Dr. Kanavel in regard to the diagnosis of this frequent and too often under-rated lesion. The practical character of this work may be shown by the following quotation from the preface: "The chapters are so grouped that the busy practitioner can find the part dealing with his particular case quickly. Given a case in which the practitioner is in doubt, he should read the chapter upon 'Diagnosis and Treatment in General.' This will indicate the group into which his case falls, and will also direct him to the proper sections of the book where cases of that nature are treated in detail." The illustrations are large and remarkably clear and instructive.

The three cardinal symptoms and signs of tenosynovitis are:

1. Exquisite tenderness over the course of the sheath, limited to the sheath. The involuntary expression of pain is noticed when the tendon sheath is touched.

2. Flexion of the finger.

3. Exquisite pain on extending the finger, most marked at the proximal end. This monograph is one that neither the general practitioner nor the general surgeon can afford to be without.

THE PRACTICAL MEDICINE SERIES, comprising ten volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume IX, Skin and Venereal Diseases Miscellaneous Topics. Edited by W. L. Baum, M.D., Harold N. Moyer, M.D. Series 1913. Chicago, The Year Book Publishers, 327 La Salle Street. Price of volume, \$1.35. Price of the series of ten volumes, \$10.

This is an up-to-date epitome of the literature on the skin and venereal diseases. Among the miscellaneous subjects treated are medical history, medical economics, sociology, and eugenics.

MORTALITY STATISTICS, 1912. Thirteenth Annual Report, prepared under the supervision of Cressy L. Wileur, M.D., Chief Statistician for Vital Statistics, Department of Commerce, Bureau of the Census; Wm. J. Harris, Director. Government Printing Office, Washington, 1913.

In the registration states, only California, Indiana, Michigan and Ohio show an increased death rate in 1912 over the preceding year. In California this amounted to 14.2 per thousand of population in 1912, compared with 13.7 in 1911. In Los Angeles there was an increase from 14.5 in 1911 to 14.7 in 1912. The deaths from all forms of tuberculosis showed a slight decrease in the registration area from 158.9 in 1911 to 149.5 in 1912. Cancer increased from 74.3 to 77.0, and cerebral hemorrhage, apoplexy, from 74.7 to 75.7. Nephritis, Bright's disease, increased from 97.5 to 103.1 per 100,000 population. The total number of deaths from tuberculosis decreased from 94,205 in 1911 to 90,360 in 1912. The registration cities of California are credited with 21,670 deaths, of which 5,665 occurred in Los Angeles and 6,770 in San Francisco. In California there were 3,102 deaths from tuberculosis in the cities of 10,000 or more inhabitants and 2,050 in the rural districts. Of the total mortality from tuberculosis in California, 51,039 were males and 39,321 were females.

YEAR BOOK, with Proceedings of the Fifty-third Annual Convention of the United States Brewers' Association. Held in Atlantic City, N. J., October 3d and 4th, 1913. The United States Brewers' Association, Publishers, New York, 1914.

Under the caption "Alcohol and Society," there appears in this volume an epitomized translation of the report of the Swedish Association of Physicians on this subject. It is a question of interest to physicians in practically all of its bearings. True scientific investigation should displace the exaggerated statements of those who are prejudiced in their attitude for or against the use of the alcoholics. Thus, there is room for more exact knowledge concerning alcohol as a cause of physical and mental diseases. When does the use of alcoholics become an abuse of alcohol? In what way do the various alcoholics differ in their effects? What are the causes of the abuse of the alcoholic beverages? These are a few of the many questions considered in this report. Some idea of its completeness may be gained from the fact that 174 pages are devoted to case studies of alcoholics. It is well worthy translation into English in its entirety.

THE PATHOGENESIS OF SALVARSAN FATALITIES. By Sanitäts-Rat, Dr. Wilhelm Wechselmann, Directing Physician of the Dermatological Department, Rudolph Virchow Hospital in Berlin. Authorized Translation by Clarence Martin, M. D. First Lieut. M. R. C., U. S. Army, Late Clinical Assistant St. Peter's Hospital for Stone and other Urinary Diseases, London; Member Association Military Surgeons, Berlin Urological Society. St. Louis, Mo. The Fleming-Smith Company, Medical Publishers, St. Louis, U. S. A.

Millions of injections of salvarsan have been given without untoward incident, which would argue against a purely toxicologic explanation of the occasional salvarsan fatalities. In a rich experience covering a large number of salvarsan injections, the author has had but a single fatality. The history of this case is given at considerable length. Rejecting the hypothesis of a peculiar hypersensitiveness as well as

the theory of emulative action and the possibility of the degeneration of the preparation used. Wechsellaum ascribes the salvarsan fatalities to insufficiency of the kidneys. The monograph contains short histories of a large number of fatal cases. The following precautions are urged:

1. The most exact technique.
2. A dose of the drug carefully adapted to the individual case.
3. Careful observation of the urinary secretion when employing salvarsan; resorting to the most exact chemical and microscopical examination of the urine. This holds good particularly when the combined treatment is employed.
4. The conjoint use of salvarsan with heavy mercurial treatment is dangerous. If one will use the combined treatment, then give mercury very carefully many days after the last salvarsan injection, but never reverse this rule.

5. Take into careful consideration every general reaction or rise of temperature, following the use of salvarsan and make a full investigation of the causes of such effect.

Only by close obedience to the above will it be possible to begin the more refined, scientific investigation of apparently so simple, but in reality highly complicated, an occurrence as a salvarsan fatality.

ANNUAL REPORT OF THE SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE OF THE UNITED STATES for the Fiscal Year 1913. Government Printing Office, Washington, 1914.

Among the alleged tuberculosis cures mentioned in this report, are the Friedman treatment, the Duket treatment and the Von Ruck treatment. The universal prevalence of tuberculosis and the numerous claims made for different methods of treatment render necessary systematic studies of the disease in the

field and in the laboratories which will throw light on its relation to interstate traffic. The question of the relationship of the various acid fast bacteria to the tubercle bacillus is of great importance, especially in view of the fact that some workers have claimed the production of resistance to tuberculosis infection by animals as a result of the treatment with such acid-fast bacteria. The question of the change of biologic characteristics of the tubercle bacillus by passage through the cold-blooded animal is also one that should receive attention.

PRINCIPLES AND PRACTICE OF HYDROTHERAPY for students and Practitioners of Medicine. Embodying a Consideration of the Scientific Basis, Technique and Therapeutics of Hydrotherapy and some Allied Branches of Physiologic Therapy. By George Knapp Abbott, A. B., M. D. Dean of Faculty and Professor of Physiologic Therapy and Practice of Medicine in the College of Medical Evangelists Superintendent of The Loma Linda Hospital. Second edition, revised and enlarged with 128 illustrations. The College Press, Loma Linda, Cal.

Our good opinion of this work is attested by the fact that we have already presented to our readers some of the excellent material and plates that appear in this monograph. The profession of this region may well be proud of the fact that such an excellent work has been written by one of our local men and issued by a local press. Ordinarily hydrotherapy does not receive sufficient attention at the hands of the teachers of therapeutics in the medical schools. The practical teaching of the subject is unduly neglected. In this volume the entire subject is well covered and most lucidly presented. Of the illustrations, fifty-five are plates, which are excellent and well-selected. We congratulate the author and the press upon the appearance of the work, from which we predict a large sale. It is a work that you ought to buy, unless you are well informed about hydrotherapy, and one that you will want if you are well up on the subject.

COMMUNICABLE DISEASES. An analysis of the Laws and Regulations for the Control Thereof in Force in the United States. By J. W. Kerr, Assistant Surgeon General and A. A. Moll, A. B. Prepared by Direction of the Surgeon General. Treasury Department United States Public Health Service, Public Health Bulletin No. 62, July, 1913. Government Printing Office, Washington, 1914.

This bulletin is a sequel to a Public Health Bulletin, Number 54, and presents a comparative statement of the provisions contained in Federal, State, and Territorial laws and regulations for the control of communicable diseases. Using as a basis census figures, it may be very conservatively estimated that at least 25 per cent of the deaths in this country have for their direct or immediate cause communicable diseases. This means at the very least over 300,000 deaths and (using the lowest possible ratio) over 3,000,000 of cases of communicable and therefore preventable disease occur every year in the United States.

TEXT-BOOK OF ANATOMY AND PHYSIOLOGY FOR NURSES. By Amy E. Pope, author, with Anna Caroline Maxwell, of "Practical Nursing," and Instructor in the School of Nursing of the Presbyterian Hospital in the City of New York. With 135 illustrations. G. P. Putnam's Sons, New York and London. The Knickerbocker Press, 1913.

This text-book is based on selections made by a competent nurse from standard authorities, such as Howell's Physiology, Kirk's Physiology, and Gerrish's Text-Book of Anatomy of American Authors.

TUBERCULOSIS. Its Cause, Cure and Prevention. A revised edition of "The Great White Plague" (A Book for Laymen). By Edward O. Otis, M. D. Professor of Pulmonary Diseases and Climatology, Tufts College Medical School; late President of the Boston Tuberculosis Association; late Visiting and Consulting Physician to the Massachusetts State Sanatorium; Member of the National Tuberculosis Association; Corresponding Member of the International Anti-Tuberculosis Association. Thomas Y. Crowell Company, Publishers. New York.

Dr. Otis is well known in anti-tuberculosis work. This volume is written

primarily for laymen. He speaks ex-cathedra in a plain non-technical manner, and covers very satisfactorily the many aspects of tuberculosis that are of general interest. It is a delightful optimistic presentation of the subject.

A SYNOPSIS OF MEDICAL TREATMENT. By George Cheever Shattuck, M.D., Assistant Physician to the Massachusetts General Hospital. Second Edition Revised and Enlarged. W. M. Leonard, Publisher, Boston, 1914.

This work represents an attempt to offer clearly and concisely, sound principles of treatment based on known pathology. It is practically an epitome of the methods used in the Massachusetts General Hospital and those advocated by the staff of the Harvard Medical School. Its brevity is its most severe criticism.

THE MIDWIFE IN ENGLAND. Being a Study in England of the Working of the English Midwives, Act of 1902. By Carolyn Conant VanBlarcom, R. N. Secretary of the Committee for Prevention of Blindness, State of New York; Chairman of Committee on Midwives of National Organization for Public Health Nursing; formerly Assistant Superintendent and Instructor in Obstetrical Nursing at the Johns Hopkins Hospital Training School for Nurses. With an introduction by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery in the Cornell University Medical College; Visiting Obstetrician to Bellevue Hospital, New York City; Surgeon to the Manhattan Maternity and Dispensary; Consulting Obstetrician to the New York Maternity and Jewish Hospitals. Prevention of Blindness No. 13. December 1913. 130 East 22d Street, New York City.

It is estimated that midwives attend about forty per cent of all births in America, in the large cities, varying from twenty-five per cent in San Francisco to seventy-five per cent in St. Louis. In California there is no statutory requirement for the training, licensure or control of midwives. The city of Los Angeles, through an ordinance adopted July 19th, 1910, provides for examination and licensure by the city board of health, the licensure being for one year only. Licenses are revocable for criminal practice.

There are midwives in all of the

States, and for these women there should be training, licensure and state control. The untrained, unlicensed, unsupervised midwife is a dangerous factor in society. Fitness or unfitness in a midwife means life or death, seeing or blindness, health or invalidism, physical well-being or life-long misery, for untold numbers of mothers and children in this country.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia, Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. March 1, 1914. Lea & Febiger, Philadelphia and New York. Price \$6.00 per annum.

This is an excellent and very satisfactory epitome of contemporaneous literature. It covers Surgery of the head and neck, Surgery of the thorax, including diseases of the breast, Infectious diseases, including acute rheumatism, croupous pneumonia, and influenza. Diseases of children, Rhinology and laryngology, and Otology. A very good index adds to the usefulness of the volume.

PRACTICAL SANITATION. A Handbook for Health Officers and Practitioners of Medicine. By Fletcher Gardner, M.D., Captain Medical Corps, Indiana National Guard; First Lieutenant Medical Reserve Corps, United States Army; Health Commissioner of Monroe County, Indiana, and James Persons Simonds, B.A., M.D., Professor of Preventive Medicine and Bacteriology, Medical Department, University of Texas; Lately Superintendent Indiana State Laboratory of Hygiene. Illustrated. St. Louis. C. V. Mosby Company, 1914.

This work is a comparatively non-technical exposition of the duties of the health officer. The general prophylaxis of venereal disease receives brief treatment. No opportunity should ever be let pass to point out the multifarious dangers of impure sexual intercourse. It should always be insisted that the venereal diseases are never trifling matters, and that of the two, syphilis is

the less dangerous to life. But if the man is obdurate, he should be instructed to use the methods now in use in military service, which have greatly reduced the amount of venereal infection:

1. A 1:1000 bichloride solution or a 1:500 permanganate solution is used to cleanse the parts.

2. An ointment of 10 per cent argyrol in lanolin is injected into the urethra.

3. Twenty grains of a 33 per cent calomel ointment made with a lanolin base is rubbed over the parts.

If this prophylactic treatment is well applied, the danger of venereal infection is minimized. Packets containing these antiseptics in convenient form are now put up by several houses.

With the woman, the above treatment cannot be used. She is therefore forced to depend on the bichloride or permanganate applied by douche, or better, by a pledget of absorbent cotton.

GERIATRICS: The Diseases of Old Age and Their Treatment, Including Physiological Old Age, Home and Institutional Care, and Medico-Legal Relations. By I. L. Nascher, M.D., New York, with an Introduction by A. Jacob, M.D., with 50 Plates Containing 81 Illustrations. Philadelphia. P. Blakiston's Son & Co., 1012 Walnut Street. Price \$5.00 Net.

The title is derived from the Greek, *geron*, old man, and *iatrikos*, medical treatment. Mnemonic expediency makes up somewhat for the faulty etymological construction. This volume bears the distinction of being the first American work on senile diseases since Charcot and Loomis' "Diseases of Old Age," published in 1881. The etiology of senile arteriosclerosis receives very satisfactory treatment. Among the many practical suggestions, we note that the author has used the red amorphous phosphorus in senile arteriosclerosis for several years. Given originally as a substitute for ordinary phosphorus in senile debility it was found that it was eliminated as amorphous phosphate of

lime and that the lime elimination was therefore increased. Weil's experiments showed that the lime elimination in arteriosclerosis was diminished. Phosphorus has the property of combining with lime and increasing the lime assimilation. In the small doses which can be given when the ordinary phosphorus is employed the phosphorus will combine with the lime of the food and increase the amount of lime salts in the body. When given as amorphous phosphorus the dose is two grains or more several times a day, and with a lime-free diet the lime required for the combination necessary to secure the elimination of the phosphorus excess, is drawn from the abnormal lime deposits. This appears to be the rationale of the treatment and explains the good results obtained from its use.

GUNSHOT INJURIES: How They Are Inflicted, Their Complications and Treatment. By Colonel Louis A. Lagarde, United States Army Medical Corps (Retired), late Commandant and Professor of Military Surgery, U. S. Army Medical School; Professor of Military Surgery, Medical Department, N. Y. University. Prepared under the Direction of the Surgeon General United States Army and Published by authority of the Secretary of War. New York, William Wood & Company, 1914. Price \$4.00 net.

This is a standard work that all surgeons will want.

The rule in civil practice has been to operate on all cases of penetrating and perforating gunshot wound of the abdomen, whereas, in military practice in active campaign the rule is to operate only on cases exhibiting symptoms of internal hemorrhage. So far as the practice in active campaign is concerned, the rule will have to stand until we can change the unfavorable environments, a thing hardly possible. The rule followed in civil practice is based upon statistics of operated and non-operated cases, and the latter made such a poor showing that laparotomy, under favorable conditions was established with apparent reason. In the earlier history of the operative treat-

ment the showing was far more favorable to operation than it has become in recent years. The results of the laissez-faire treatment of the military surgeon have awakened the attention of surgeons in civil practice. They are now revising their later statistics and a study of these make it a question if operation in all cases is the proper rule to follow. Military statistics are very much one-sided. They take cognizance only of the cases which reach hospital care, which are those for the most part that have survived a number of hours already; they are the cases which have survived more or less shock and that have not died of internal hemorrhage.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otolaryngology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia. Volume I. Twenty-fourth Series, 1914. J. B. Lippincott Company, Philadelphia and London. Price \$2.00.

The commendable character of this work is well known. The present volume contains an up-to-date article, that almost gives a glimpse into the future, by Dr. Victor C. Vaughan on The Importance of Frequent and Thorough Medical Examination of all Citizens. That medicine is fast becoming a fundamental social service must be evident to all. The profession in this country is fully acquainted with what is taking place in this connection in Germany and England. In neither of these countries is the profession satisfied with the conditions which have been forced upon it. Like conditions are, in all human probability, coming to the profession in this country. The part of wisdom is for the medical man to become a leader in this movement and so direct it that it will be of the greatest service to both the medical profession and the public.

In the general betterment of the race, medicine should be the leader.

Considerable practical interest attaches to the article on *The Surgical Treatment of Infantile Paralysis*, by DeForest P. Willard, M. D. The surgical treatment of infantile paralysis calls for a combination of gymnastic training, mechanical support, and operative procedures. The prevention of deformity by the early application of appropriate splints and braces will save many months of treatment in later years. Any form of locomotion is better than total helplessness. Any child with sufficient arm power to use crutches, can be eventually gotten on its feet and trained to some form of locomotion. No case of infantile paralysis can be cured in one treatment, and rarely in one year of treatment. Patient, persistent efforts on the part of parents and physicians give the only hope for success, and the results now obtained by persistent care are so satisfactory, that the large majority of these cases can be brought back, if not to normal, at least to a useful and happy existence.

OPHTHALMIC SURGERY. A Treatise on Surgical Operations pertaining to the Eye and its appendages, with chapters on Para-operative Technic and the Management of Instruments. By Charles H. Beard, M.D. Second Edition, Revised and Enlarged, with 9 Plates, showing 100 Instruments and 374 other Illustrations. P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia. Price \$5.00 net.

In this edition, two new chapters, one on "The Newer Operations for Glaucoma," the other on "The Surgical Treatment of Detachment of the Retina," have been added. Among the descriptions of valuable surgical methods that have been inserted are those relative to Toti's and Butler's operations upon the lachrymal canal, Elsehnig's and Motais' methods for tendon advancement, Rogman's and Wieherkiewicz's for epicanthus, Angelucci's for ptosis, Verhoeff's and Green-Ewing's for entropion, Terson's

for ectropion, Falehi's for central coloboma of the upper lid; Buedinger's restoration of the lower lid, using cartilage of the ear, and Meisner's restoration of the entire lid, using the whole thickness of the helix; a large section, embodying the Schobel-Kuhnt methods of conjunctivo-keratoplasty, has been added, likewise, the newer measures for keratoconus and those for corneal grafting, and the improved technic for anterior synechiotomy. In the chapter on Extraction of Cataract the new features include Elsehnig's simple extraction with peripheral incision of the iris, Homer Smith's preliminary capsulotomy, Hulen's vacuum extraction of the lens in its capsule, and the latest phase of the "Indian Operation."

The author is expert in the art of description.

DIAGNOSTIC SYMPTOMS IN NERVOUS DISEASES. By Edward L. Hunt, M.D., Instructor in Neurology and Assistant Chief of Clinic, College of Physicians and Surgeons, New York City. 12 mo. of 229 pages. Illustrated. Philadelphia and London. W. B. Saunders Company, 1914. Cloth, \$1.50 net.

Here we find in brief space the salient points and leading symptoms of the principal nervous diseases. It will appeal to the student, interne and general practitioner, both as a reference and as an aid in diagnosis. The illustrations are excellent and largely original.

THE PRACTICAL MEDICINE SERIES. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume X. Nervous and Mental Diseases. Edited by Hugh T. Patrick, M.D., Professor of Neurology in the Chicago Policlinic, Clinical Professor of Nervous Diseases in the Northwestern University Medical School, Ex-President Chicago Neurological Society. Peter Bassoe, M.D., Assistant Professor of Nervous and Mental Diseases, Rush Medical College. Series 1913. Chicago, The Year Book Publishers, 327 S. La Salle Street.

The present volume is one of a series of ten issued at about monthly inter-

vals, and covering the entire field of medicine and surgery. Each volume being complete for the year prior to its publication on the subject of which it treats. Price of each of these volumes, \$1.35. Price of the series of ten volumes, \$10.00. This series is published primarily for the general practitioner, at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

BIOLOGY, GENERAL AND MEDICAL.

By Joseph McFarland, M.D., Professor of Pathology and Bacteriology, Medico-Chirurgical College of Philadelphia. Second Edition, thoroughly Revised. Octavo of 457 pages, with 160 illustrations. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$1.75 net.

In addition to a brief consideration of general biology, special attention is paid to the problems of Blood-relationship, Infection, Immunity, Parasitism, Inheritance, Mutilation, Regeneration, Grafting and Senescence. It is a treatise on Biology that appeals particularly to physicians.

THE PRACTICE OF PEDIATRICS.

By Charles Gilmore Kerley, M.D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Octavo of 878 pages, 139 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

In a review of analyses of foods, many substances will be noticed which according to their chemical composition have the same food value, but which common sense tells us are not interchangeable. For instance, no one would attempt to feed to a human being cracked oats, unless thoroughly cooked, but he would give them raw to the lower animals. They will nourish a man or the animal equally well, but for man they must be prepared, while the horse, for example, can utilize them in their original state. This illustrates the importance of adapting food to the

consumer. Often the question in feeding is not so much, Is the food nutritious? as, Can the patient assimilate it? Oftentimes success in infant feeding lies in the physician's ability to discover a form of fat, carbohydrate and proteid which the infant can assimilate.

It is a book full of common sense. The author is well known as a teacher of pediatrics and for his clinical work in diseases of children. The profession will welcome this work, which is an amplification of the author's "Treatment of the Diseases of Children." It is thoroughly up-to-date and sufficiently in detail to be of great practical value to the practitioner.

STATE BOARD QUESTIONS AND ANSWERS.

By R. Max Goepp, M.D., Professor of Clinical Medicine at the Philadelphia Polyclinic. Third Edition thoroughly Revised. Octavo Volume of 717 pages. Philadelphia and London: W. B. Saunders, 1913. Cloth, \$4.00 net; Half Morocco, \$5.50 net.

The last edition appeared two years ago. In this revision, questions are added bearing on serology, particularly serum and bacterin therapy; chemotherapy, including the recent innovations in the treatment of syphilis; tropical disorders and other diseases caused by animal parasites; and the newer cardiac physiology, with the graphic methods of studying the circulation. It is a remarkable book, and its popularity is attested by the issuance of seven printings in three editions within five years.

The volume of the 10-mile rocky crust of the earth, including the mean elevation of the land above the sea, is 1,633,000,000 cubic miles.

One per cent of the contents of the oceans would cover all the land areas of the globe to a depth of 290 feet.—United States Geological Survey.

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E. N.; Rieger, F. F.; Robinson, J. H.;
Singleton, W. T.; Schmidt, H. C.;
Smith, C. S.; Traber, C. H.; Tebbetts,
J. H.; Tower, O. I.; Turner, G. B.;
Vanderhoof, D. A.; White, F. M.;
Wright, H. W.; Wylder, M. K.; Tobin,
P. A.; Whitten, W. D.; Bellwood, H.
H.; Binford, N.; Black, E. C.; Bolin,
J. T.; Brown, B. C. B.; Bushel, G. B.;
Carpenter, P. H.; Clare, M. W.; Church,
W. G.; Dirks, C. B.; Dodge, F. L.;
Goodall, O. P.; Hilliard, Ruth; Huiz-
enga, Richard; Iber, C. H. I.; Jones,
E. F.; Klutho, J. C.; Lancaster, J. S.;
Major, R. H.; Petr, F.; Powell, C. F.;
Sanders, A.; Sawyer, F. W.; Stevens,
C. E.; Stone, A. C.; Thompson, J. M.;
Williamson, N. E.; Sutton, R. L.

There were 19 other certificates granted
under this classification providing certain
conditions be complied with.

Granted by Oral Examination.

Atwood, J. B.; Barndt, M. A.; Car-
penter, C. R.; Cooke, W. H.; Cow-
perthwaite, A. C.; Henry, W. O.; Hurd,
S. W.; Kauffmann, H. B.; Miner, D. O.;
Murphy, F. W.; Peddicord, H.; Rich-
ardson, C. H.; Sweet, C. L.; Titus, J.
H.; Trimwith, J. H.; Williamson, E. L.;
Anthony, L. A.; Braunstein, Jos.;
Burger, T. O.; Cleaver, J. H.; Ely,
Leonard, W.; Flannagan, L. E.; Furst,

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Sample and literature on application.

O. J.; Ghent, J. A.; Gill, A. F.;
Hicks, J. R.; Horn, W. L.; Howes,
Caroline; Johnson, G. F.; Keeton, T.;
McLeish, A.; Macpherson, J. F.; Rad-
cliffe, W. M.; Rogers, A. M.; Rossiter,
E. W.; Roberts, E. K.; Sandow, B. F.;
Smith, F. L.; Van Tine, Coehran; Wat-
son, H. G.; Wilcox, W. S.; Worthing-
ton, M. H.

Sixty-one applicants appeared before
the Board for an oral examination. Of
this number, 19 or 31 per cent failed.

Granted by Written Examination.

Physicians and Surgeons.

Ballard, C.; Bolinger, H. J.; Bowers,
C. H.; Commons, E. L.; Dowdle, E. E.;
Forbes, H. S.; Franklin, J. W.;
Grundy, G. M.; Harrah, O. M.; Harvey,
R. W.; Herbert, G. S.; Herriek, A. B.;
Jesberg, S. H.; Linhart, L. R.; Old,
F. J.; Silbermann, Colman; Smith, J.

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Petheram, C. C.; Roop, E. D.

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lobe of the ear for microscopic examination, it should in a normal condition be red. Blood taken in these two places is arterial or capillary. That from the end of the digit is venous and normally blue.

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SOUTHERN CALIFORNIA PRACTITIONER

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No. 5

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A CASE OF MORAL IMBECILITY BENEFITED BY CRANIECTOMY.

BY CECIL E. REYNOLDS, M.R.C.S.

Ruth T., at 11½ years, weight 86 lbs., height 4 ft. 10½ in., was sent to me in November, 1912, on account of mental deficiency, and uncontrollable disposition.

She had suffered from headache since the age of two years, and was backward in walking and talking. About the same time she had spells of vomiting without apparent cause, and unrelated to meals. These attacks of vomiting and headache continued, on and off, until within seven months of her visit to my office.

At the age of four, it was noticed that she squinted, and this squint steadily increased. She started at school in 1900 and then she was suspected of being decidedly backward. Seven months before coming to Los Angeles, the headache and vomiting ceased, but the mental defect rapidly became worse, and she was cruel towards animals and children, and quite uncontrollable.

She had never had fits, but wet the

bed occasionally. Whooping cough and chicken pox were the only illnesses suffered in the past, and there was no family history of insanity, syphilis or alcohol.

I saw the father, mother and younger sister. The latter was a robust, bright, healthy child, and the two former normal and temperate, albeit lacking in the power of control of children.

Upon being brought to my office she became uncontrollable, threw herself on the floor in a fit of anger, fought, kicked and screamed. This demeanor was so constant that a physical examination was almost impossible. I was unable to examine her discs, but could determine that there was no definite paresis of the limbs; that the knee-jerks were plus and equal, and that the plantar reflex was flexor on both sides. She had a paresis of the external recti, which was alternating, but most marked on the right.

Her general attitude was mildly suggestive of a cerebral diplegia to the ex-

tent that she frequently held both hands, when not in use, in front of the body in the "pen holding" position, with the fingers pointing downwards, and was slightly pigeon-toed, i. e., turned both toes in a little, indicative of the mildest stage towards scissor-legged progression. Her intelligence was decidedly of a low order. I advised the parents that she was probably one of those rare cases of early closure of the sutures, preventing expansion of the brain, and that craniectomy could alone give relief. In forming this diagnosis I took into consideration the fact that she had had pressure symptoms, followed by progressive moral degeneration.

Accordingly I operated at the California Hospital and was assisted by Dr. Alfred Fellowes, whilst Dr. C. W. Norton administered 1% chloroform with the Vernon Hareourt inhaler. The method of craniectomy was of my own devising. The incision was made from ear to ear just behind the line of the coronal suture, and the scalp and pericranium quickly stripped forward and laid over the face, covered with hot saline gauze. There was no trace of frontal suture. The coronal suture was almost obliterated, and the skull very thick. Trephine openings were made at the circular spots marked in the illustration, at A and B; two saw cuts one-fourth of an inch apart, were made from A to B and two more from A to C at the glabella, and two more again from B to D. With de Vilbiss forceps the strips of bone between the various saw cuts were removed, so that by placing the thumbs under the corners at A and B, the large plate of frontal bone attached only at the glabella could be lifted up about one-eighth of an inch from the dura, without risk of snapping the bone between C and D. No trouble was encountered in crossing the longitudinal sinus, since this is but lightly attached to the skull at this

age, and all haemorrhage from the bone was arrested by hot bichloride irrigation, and Horsley's wax. The dura bulged slightly and pulsated well. Finally two saw cuts were made from A and B downwards to below the squamo-parietal suture on each side to E and F, and the periosteum and scalp replaced, and stitched in situ.

The patient made an uninterrupted recovery, save only some acetonuria from chloroform, which gave me a little anxiety for two days, and after two weeks' convalescence, was sent to Mrs. Lila Atherton at 25th street, a trained nurse, for care and observation. I append her report:

1035 West 25th St.,
Los Angeles, California.

"Dear Dr. Reynolds:—

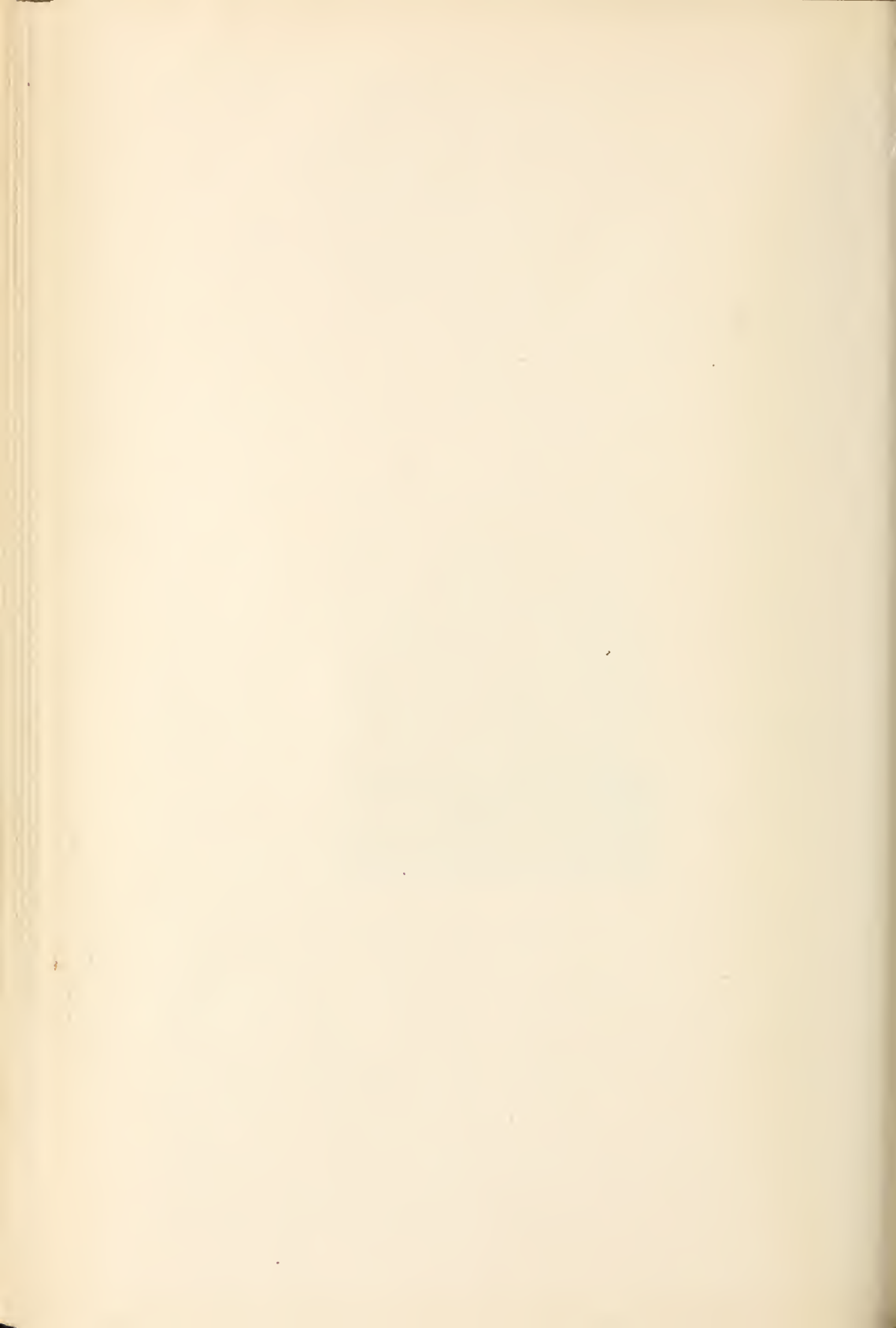
"In regard to Ruth T., whom you placed under my care in the fall of 1912, some two weeks after you operated upon her. I would say that the operation appeared to me to have decidedly beneficial results.

"I understood from her parents that before she underwent the operation she was very hard to control, was cruel to her sister and playmates, and even to animals with which she played, and was in many other respects not considered a normal child.

"From the first she improved, and we found less and less trouble in disciplining her. After we had had her some few weeks, I discovered that her teeth needed some attention, and I had very little difficulty in placing her in a dental chair, and having the work done. Afterwards her mother informed me that she had many times tried to accomplish it, but each time had to give it up.

"The last few weeks she was with me, she took considerable interest in drawing, and was in many ways bright and companionable. Her parents seemed also well pleased with her improved condition."







The child afterwards returned North and to school, and subsequent letters from her parents report docility, and progress in her studies. The photograph taken three months after operation shows complete absence of squint, and a totally different, and more intelligent facial expression. Such a pose

would have been impossible for her previously.

All the written authorities are unanimous in condemning Craniectomy for microcephalic idiocy, but the history of this case was exceptional, and the microcephaly was slight.

THE TREATMENT OF CONSTIPATION—DIET, EXERCISES AND THE MECHANICAL MEASURES CURATIVE; AGAR-AGAR AND THE PURIFIED PETROLEUM PRODUCTS THE BEST PALLIATIVES.

BY BOARDMAN REED, M.D., LOS ANGELES.

There are more rapidly fatal diseases than constipation, but probably none more prevalent and few with more varied or serious consequences. In a paper an abstract of which appeared in the Practitioner of November, 1911, I described briefly the dietetic and various mechanical methods which will nearly always cure radically the earlier and milder cases not dependent upon surgical causes.

Even some of those which have resulted from the exceedingly prevalent visceral displacements from which at least every third woman in this country suffers, will yield to a diet including much fruit and vegetables together with properly applied massage and abdominal supporters when needed, aided by regulated exercises and, in the more chronic cases, by vibration or the interrupted electric current continued for several weeks, possibly in the worst cases, months.

These treatments must be so applied as to stimulate and strengthen the abdominal muscles and peristaltic apparatus, or relieve spasmodic contractions anywhere in the alimentary tract when they are a causative factor. The vibration should be applied every other day to both sides of the lower spinal vertebrae from the eleventh dorsal down,

as well as for from one to three minutes with the shortest intra-rectal vibrator twice or thrice a week.

Every general practitioner who expects to cure and not merely palliate his cases of constipation, should be equipped with a good vibrator and knowledge of the best ways of applying it. A good book on the subject* will enable any doctor of average ability to use it with success not only in constipation but also in many other obstinate troubles. If he would be thoroughly fitted to treat chronic diseases, he should be provided further with at least some of the less expensive forms of electric apparatus including a sinusoidal current and the latest edition of Abram's "Spondylotherapy." (San Francisco).

Exercise in the case of sedentary people should be taken regularly for about half an hour morning and night and, if it includes a rubbing of the whole body into a glow with a rough towel after sponging with cold or cool water, the cure will be the quicker and surer especially for persons with a poor circulation.

The diet in stubborn cases of constipation must be as laxative as possi-

*That by Dr. Arnold Snow, N. Y., 1912, is one of the best.

ble including one or two glasses of water some time before breakfast, one at bedtime and, besides, another at least three times during the day between meals. Fruit, fresh, dried or stewed, should be taken as a part of nearly every meal, plenty of vegetables at one or two of them, and a bran muffin as well as a slice or two of toasted whole-wheat bread with butter at most of the meals. A liberal ingestion of olive oil on salads is often a valuable, though not indispensable, adjuvant. Meat may be eaten sparingly, not more, usually, than a small or moderate portion once a day.

Special directions as to the diet are necessary for cases with dilated stomachs and the very prevalent hyperchlorhydria and hypersecretion one of which is the fault in over half the cases of indigestion, when it has not already, through long neglect, progressed into ulcer of the stomach or duodenum, with cancer as a further probable result unless promptly cured.

Patients who have an excess of hydrochloric acid can be rarely cured of constipation till the excess has been remedied. The opposite condition—deficient secretion of the acid or the normal ferments—should also be corrected by supplying either these or the appropriate hormones. Badly dilated stomachs or bowels tend to cause constipation but will often yield to dietetic and mechanical treatment. A plentiful use of liquids and the bulky diet, which is so helpful in uncomplicated constipation, must be modified or deferred in the more marked cases of dilatation till such faults have been measureably improved, though the coarsely ground or finely cut agar-agar and purified petroleum preparations to be described later, are frequently effective in spite of moderate dilatations or displacements, and even a kink in the small intestines in such a very unpromising instance as that narrated in Case I did not prevent prompt relief by these

newer remedies. But it should be impressed upon the mind of every patient that punctuality in going to stool at exactly the same hour every day is an indispensable prerequisite to success.

Fifteen years ago while practicing in Philadelphia, I made a trial of vaseline and other petroleum products which proved effective in the cases of a number of my constipated patients, but in some of them seemed to disturb the heart and in consequence they were abandoned; and six or seven years ago, after seeing a brief mention of the laxative properties of agar-agar, I gave it a trial, but not having any definite information as to palatable ways of serving it or as to the quantity needed to be effective, directed the use of too small amounts which had no effect. But last year when my Case I became so troublesome, even threatening to necessitate an operation, I determined to see if agar-agar, being really an apparently harmless vegetable, could not be made so palatable that comparatively large quantities could be eaten with the meals. A few experiments proved that, when added to one of the soups or purees and well stirred, it merely produced a thickening effect without any impairment of the taste. Indeed the mixture was quite appetizing.

In a private letter Dr. J. H. Kellogg of Battle Creek assured me that "ordinary paraffine oil can be purified and made safe by agitation for a long time with water. Half a pint of paraffine oil or petroleum put into a two-quart fruit jar with a quart of water and shaken for a couple of hours, then allowed to separate by standing, will be quite well relieved from the anthracin and other injurious toxins which it contains."

He added that besides its lubricating effect, "it acts in a double way, first by stimulating peristalsis all along the line from the stomach to the rectum, and second by dissolving and holding in solution a large amount of intestinal

toxins many of which are more soluble in paraffin oil than in water. The oil itself not being absorbed, the toxins are carried off." The oil also soaks into the feces softening them, thus greatly facilitating their passage. My own more limited experience with these oils would seem to indicate that they exert more of a soothing and healing influence upon the mucosa than any stimulating effect on either the secretion or muscles of the intestines such as follows the administration of the usual purgatives. They are much used externally to heal lesions on the skin or in the nares. But their lubricating and softening action alone would make them very useful in constipation when completely freed from their contained toxins, though less effective by themselves than a free use of the agar-agar.

These two remedies have proved so phenomenally successful for stubborn cases in my hands and in the practice of a few of my medical friends that, though now virtually out of practice, except a very little consultation work and the care of a few old friends not to be shaken off, I am going to considerable trouble and expense to have published reports of some of the more striking cases.

CASE I. A professional man, aged 72, constipated for 21 years, yet so slightly that gr. $\frac{1}{4}$ of aloin or a few drops of F. E. cascara acted satisfactorily. The radical cure by a special diet and the newer mechanical measures was not tried till too late for success. Within the last ten years patient developed arteriosclerosis and, about five years ago, an obscure nervous lesion caused various pressure symptoms including a right hemiplegia which disappeared at the end of five days. A year later both legs suddenly became weakened and have remained so. There was also an old myocarditis and a whiff in both valves. Over two years ago a beginning epithelioma was removed from his tongue by Dr. Mac-

Gowan of Los Angeles. Meanwhile the constipation had increased till within the last year, two or three times the usual doses of physic were required and even the largest produced only liquid straining movements. There were indications of partial obstruction. X-ray plates showed a somewhat dilated cecum, an enlarged and prolapsed stomach and a colon arched far downward causing an abnormally sharp angle at the splenic flexure and a kink in the small intestine. It looked as though an operation might become necessary and surgeons were consulted. In this exceedingly chronic and stubborn case the radically curative mechanical measures having failed, as they sometimes do in old chronic cases, I decided to try agar-agar and a purified petroleum preparation together with special exercises, a laxative diet and, of course, strict punctuality in going to stool. In November, 1913, the agar-agar was begun, either two tablespoonfuls of the finely chopped stems or a heaping tablespoonful of the ground stems being added to a large bowl of soup or pureé and well stirred. This was served at lunch and dinner while at breakfast a like quantity was softened and partly dissolved in a bowl half full of hot water to which half a tumbler or more of grape juice was added. Sometimes a raw egg was thoroughly beaten and mixed with them and this improved the taste.

The breakfast included, besides the foregoing, a buttered bran muffin, some whole-wheat bread, preferably toasted, and fresh or stewed fruit. At the other meals the laxative diet already described was strictly carried out. An ounce of Para-lax or carefully re-washed Nutrol or liquid albolene was also taken twice a day before meals.

Within three days the patient began to have copious, large formed stools, at least two daily, and often three, one after each meal, with a feeling of internal cleanness and comfort after-

ward, as he reported, "never experienced before since boyhood." This marked improvement has continued up to this writing, except when on one or two days he had taken Nutrol in extra large doses without rewashing it, being temporarily out of the agar-agar. His movements continued free as before, but his blood-pressure increased to 200 M of mercury at the same hour of the morning when it previously had been 155 to 160, and his rest had been much disturbed by headache and intestinal gas. The usual dose of the Nutrol is one to two fluidrams twice a day and when it was washed carefully in water as described before, that amount had been taken without any unpleasant effects, but the extra dosage of the unwashed preparation up to three to four fluidrams t. d. was evidently not entirely safe. Of late he has not found any mineral oil necessary, the agar-agar having alone sufficed without any increase in the quantity.*

The following case in which there was a strong suspicion of gastric ulcer, was promptly relieved and whatever faults there may have been in the gastro-intestinal tract, apparently cured within less than a month, by agar-agar and Nutrol:

CASE II. Lady teacher aged 32, reported January 21, 1914. Referred by Dr. William Duffield of Los Angeles. Very poor health from age of 7 to 28 years; probably tuberculosis. Sent by her doctor in the East to Colorado four years ago. Since sojourn there better general health except indigestion, much flatulence and nervous symptoms. Three years ago severe gastritis for four months. During a few weeks before she came to me, stomach markedly worse; acid eructations, acute

pain for two hours after meals and occasionally severe vomiting. Examination revealed a decidedly sensitive spot over the pit of the stomach. Sleep much impaired and broken badly after 2 a.m. Bowels irregular—alternate constipation and diarrhoea. Headache at times, especially at periods. Owing to the probability of ulcer, tube not used, but simple test of acidity made by my modification of the Benedict effervescence test. This showed a marked increase of the tympany at the height of digestion after the drinking of a solution of soda in a glass of water. Ordered agar-agar two drams with each meal and also Nutrol two fluidrams before meals. Eleven days later reported herself better in every way—as to pain, vomiting, gas, sleep, nerves and all. Was having a formed movement after each meal, felt stronger and had been getting ten hours' sleep every night. Six weeks later—March 17—reported still better with same diet and medication. Had gained at least three pounds in weight. Both remedies were then cut down to twice a day in the same dose and the laxative diet left unchanged.

CASE III. Married lady aged 35, an anemic neurasthenic invalid for six years and badly constipated during all that time. Much emaciated, weighing 78¾ pounds only before beginning this special treatment for the constipation under Dr. F. E. Corey of Alhambra. At the time of this writing she had only once missed having a good stool every day in the last several weeks since beginning the treatment, though it comes out now that she has not kept up the laxative diet at all strictly.

CASE IV. A married lady, aged 36, another of Dr. Corey's patients, took the agar-agar for two weeks recently and then after stopping it, continued to have spontaneous movements. Hers was a recent case of constipation and membranous enteritis following a

*Later, after being effective for 3 to 4 months in this case the agar-agar began to empty the bowels less thoroughly with a resulting increase of gas, and needed then the help of a pill containing 1 gr. each of aloes and iron once a day. The kink has probably become aggravated in some way.

nervous breakdown a year ago last summer.

Dr. J. M. Armstrong, of Alhambra, also has under his care several old cases of constipation that have found great relief from agar-agar, one of which especially is worth reporting:

CASE V. Professional man, aged 57. For the past six years had never had a bowel movement without a large dose of physic. The agar-agar in two tablespoonful amounts, taken twice a day, gradually effected large and fully formed stools twice a day, acting pleasantly and with extraordinary thoroughness.

Dr. C. W. Anderson of Los Angeles has seen equally brilliant results in numerous patients from agar-agar and a mineral oil singly or combined, but this paper is already too long.

In no case in which either the agar-agar or one of the oils has been given a thorough trial with the help of the prescribed exercises and diet, even without any of the other mechanical treatments, have I heard of a failure to effect normal movements and often two or three a day; and in only one case, (except the temporary incidental disturbance in Case I.) has there been any complaint of disagreement and even that one was not a just complaint. A lady who had been treated in Chicago for a stubborn chronic colitis which left her with constipation, tried the agar-agar, but quite irregularly. It acted well whenever it was taken, but she thought it caused a burning in her

stomach. It was learned after further questioning, that this resulted when she took the remedy with a mixture of cereals and cream but not when it was taken in a purée. Mushes such as cereals and cream (and worse still, rich puddings) are not suitable foods for persons who have any form of indigestion, not being capable of insalivation. They should eat their starchy foods in dry form so as to be able to masticate them with extra thoroughness.

Though Lane, the famous London surgeon, has used largely and highly recommended liquid paraffine for constipation, and it has many valuable qualities for use in persons not having any tendency to arterio-sclerosis and for short periods, my experience points to the probability that none of the petroleum products are suited for prolonged use unless after satisfactory evidence that they have been carefully cleansed of their impurities and, if necessary rewashed. But the agar-agar and thoroughly purified mineral oils seem to be harmless and the former to be a simple nontoxic vegetable which may be eaten as freely as whole-wheat bread.

It should be emphasized that these mainly mechanically acting remedies should not be given as a regular dependence to recent cases which are usually curable radically by the measures advised in the first part of this paper. They ought to be considered a kind of *dernier ressort* for difficult or otherwise nearly hopeless cases.

THE APPENDIX AS A CAUSE OF DYSPEPSIA.

BY HARRY G. WATSON, M.D., LOS ANGELES, CAL.

Dyspepsia covers a multitude of sins in diagnosis. In former years the generalized term inflammation of the bowels filled books of reference and graves of untimely deaths. In recent years if there were any disturbance in the abdomen in the lower right quadrant, the

appendix was blamed and consequently many a shelf has a nice normal appendix on exhibition, and many ulcers of the stomach, cystic ovaries, and pus tubes remain unwept, unhonored and unsung.

Fenwick, in his interesting work, calls

attention to the appendix as a cause of dyspepsia in a table of 112 cases of diseases of the stomach that were operated on during two years. The following shows the number of cases of dyspepsia due to the appendix alone, as well as the appendix in combination with some other pathological condition of the stomach or duodenum:

Disease of the appendix existed alone in 22 cases.

Disease of the appendix and gastric ulcer coexisted in 5 cases.

Disease of the appendix and duodenal ulcer coexisted in 4 cases.

So that we see that in 112 cases of dyspepsia due to some organic lesion in the digestive tract 31, or nearly 27 per cent., were attributed to the appendix alone or to the appendix in association with ulcer of the stomach or duodenum.

We realize, then, that appendix dyspepsia is a very important matter, and must always be thought of in any disturbance of the gastro-intestinal canal.

I have found that hyper-acidity and hyper-secretion are causes of acute appendicitis. It is a well-established fact that in most cases of appendicitis there is a condition of hyper-chlorhydria, that is, an increased amount of acidity of the gastric juice. On the other hand, a great many mistaken diagnoses have been made of appendicitis when the real condition was one of hyper-chlorhydria due to some other cause, either an ulcer or a neurosis.

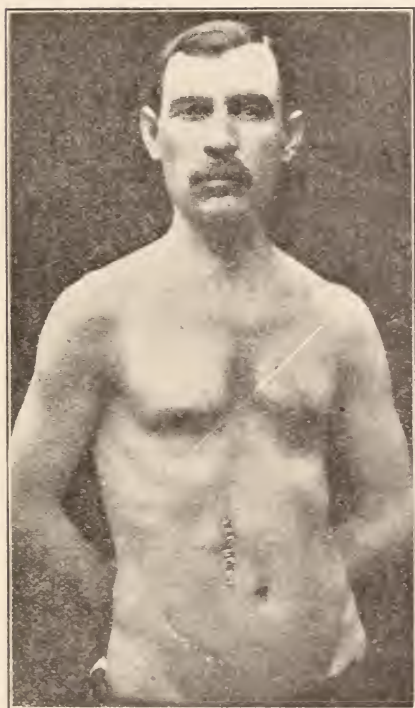
In my former clinic at the Presbyterian Hospital, New York, I was struck by the number of cases of hyper-chlorhydria that was operated on in various hospitals, the symptoms remaining the same, and the only thing the patients had been relieved of was the appendix. A great many such errors have been made by prominent surgeons and internists. It may be instructive to mention types of cases that have recently come under my care:

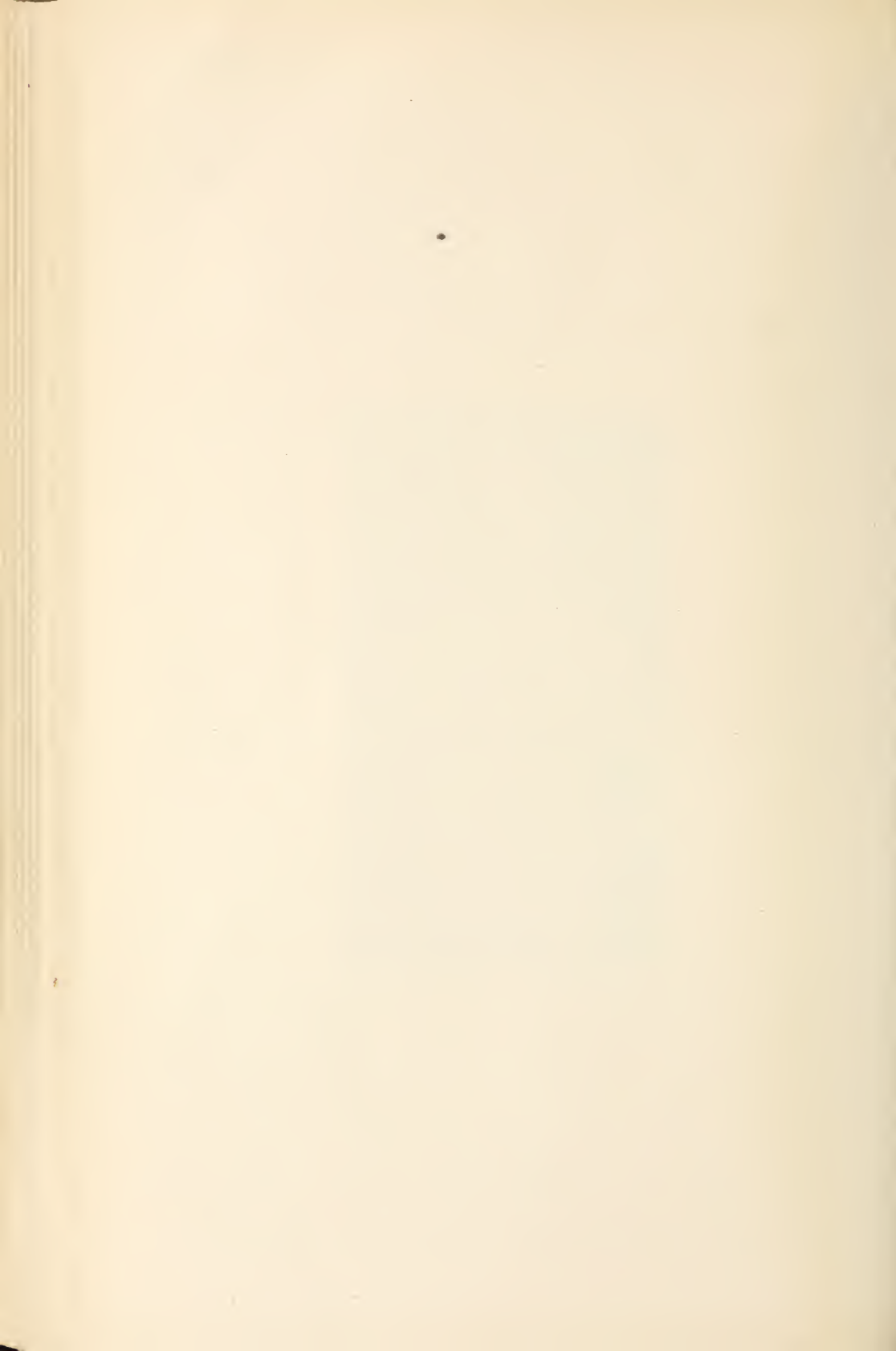
Case 495. William P., aged thirty-

three, born in Russia; worked ten years in a coal mine in Pennsylvania. This is a very interesting case, supposed to be dyspepsia due to the appendix. He did not have any hyper-acidity nor hyper-secretion, but went through the process of weeding out his organs, beginning, as usual, with the appendix. Principal points: He was perfectly well until thirteen months ago, when he was taken suddenly sick in the mines with cramps in his stomach and intestines. He was removed to his home and remained in bed two days and then felt relieved and returned to work. After five days he had another attack of pain in the stomach and intestines. He did not vomit; had no fever nor jaundice at any time. He went to the hospital in March, 1910, and was operated upon for appendicitis. The symptoms persisted. He was operated upon again in May for suspected gall-bladder disease. There was no improvement after operation; the symptoms remained the same; pain all the time in the stomach and intestines. He came to my clinic at the Presbyterian Hospital the latter part of January, 1911. After a test meal his stomach showed very little acidity and no free hydrochloric acid. Many particles of coal dust, mixed with thick mucus, came out with the stomach tube. A diagnosis of atrophic gastritis was made. His trouble certainly was not dyspepsia due to the appendix.

On the other hand the following type of case of dyspepsia due to a diseased appendix are frequently overlooked:

W. E., (private patient), aged thirty-one, magazine writer, has had no serious illness and was well until four months ago (history taken April 4, 1910); then had an attack of acute dyspepsia following a rich dinner. One week ago he had another attack of dyspepsia early in the morning following an after-theatre party; he vomited much mucus and bile, no food. The fol-





lowing morning his stomach contents were examined one hour after an Ewald test breakfast and showed the stomach practically empty; a little gastric juice was obtained which exhibited an increased acidity. Diagnosis: hyperacidity and hyper-motility, cause uncertain.

He was put on a diet rich in albumin and given an alkaline mixture with atropin. His mode of living that of theatrical critic and magazine writer kept him out of his beauty sleep, and his attacks of vomiting about 4 A.M. interfered with mine. He had several attacks of vomiting, about one a month, usually in the early morning hours consisting of mucus and bile, but very little food remnants. He complained in the meantime of nausea, never any pain in the stomach or intestines at this time, but always had a pressure in the stomach after meals and felt as if a weight were resting on his chest, as if a pussy cat were sitting there, as he expressed it. He was constipated; his appetite good. He lost some weight. The condition of ill feeling continued until August, when he had another attack of fullness and nausea. This time, and for the first time, he had intestinal

pain, more marked in the lower right quadrant over the area of the appendix. The appendix could be palpated and seemed large and swollen in the middle. Diagnosis of dyspepsia due to the appendix was made and operation advised. His pulse at this time was normal and his temperature by mouth 99.

The next day he felt somewhat better, but the pain over the appendix was more intense; his pulse and temperature were normal. Operation was insisted upon without delay. He was operated upon the following day, presenting a badly swollen appendix, which burst when delivered, exuding a little pus and small concretion. This was followed by a rapid recovery and a subsidence of his symptoms. He has gained in weight and is now enjoying his winter, shoveling snow from his front steps in the Berkshire Hills.

This is the type of cases which go along month after month giving definite gastrointestinal symptoms, but of indefinite origin, until the appendix speaks its little speech and then we say in the words of Macbeth "out damned spot" and all is serene as far as dyspepsia is concerned.

GASTRIC ULCER.

BY RUSSELL S. FOWLER, M.D., CHIEF SURGEON, FIRST DIVISION, GERMAN HOSPITAL; SURGEON, METHODIST EPISCOPAL HOSPITAL, BROOKLYN, NEW YORK.

The main indication in the treatment of gastric ulcer medically considered is stomach rest. Paradoxical as it may seem, this is best achieved through surgical measures. Years ago jejunal feeding was practiced by the German surgeons in fecal fistula involving the jejunum, but attempts to maintain nutrition by these measures were ineffectual for the most part on account of the retro-peristalsis set up and the character of the opening in the

intestine. More recently Mayo Robson[†] devised an operation upon the jejunum by which stomach rest could be secured and jejunal feeding practiced with certainty. Independently of the above, the operation has been elaborated by Mayo.* Briefly, the operation consists in a laparotomy, bringing up a loop of jejunum to the surface and

[†]Mayo Robson: *British Med. Jour.*, Jan. 6, 1912.

*Mayo: *Am. Journ. of Med. Sciences*, April, 1912.

doing a Witzel operation with a rubber catheter, size 16E or thereabouts, and attaching the loop of jejunum to the parietal peritoneum. Patients can be easily nourished through such an opening and upon withdrawal of the catheter the jejunal opening readily closes. I have performed this operation eight times for ulcer of the stomach in cases

in which the condition of the patient did not warrant a more radical operation. Four of these cases were cured while four in which the ulcer had perforated before the operation and to which a plastic operation on the ulcer was added to the above, died as the result of the diffuse septic peritonitis already existing prior to the operation.

301 DeKalb Avenue.

EARLY DIAGNOSIS OF PEPTIC ULCER.*

BY ROBERT POLLOCK, M.D.

By the term "peptic," I wish to include all ulcers so situated as to be influenced by contact with the gastric juice. It will embrace, therefore, besides those of the stomach, those located in the duodenum and in the lower portion of the oesophagus. In this latter location, however, peptic ulcer is so relatively infrequent as not perceptibly to influence statistics on the subject.

In attempting to arrive at a diagnosis in cases of "stomach trouble," as every distress "amidship" is termed by the layman, a thoughtful review of etiologic factors should ever be included. While we undoubtedly have not heard the last word on the etiology of ulcer, it is probable that, but rarely, does any single factor produce a well-developed peptic ulcer.

Before passing to the symptomatology proper, it might be well to state that certain general conditions such as anaemia, diabetes, tuberculosis and the general nervous shock from severe burns, are so often accompanied by ulcer, that their presence may suggest the diagnosis.

The most constant single symptom of ulcer is unquestionably pain. On this symptom alone, its character and periodicity considered, a diagnosis can often be made. This is particularly

true of ulcer of the duodenum. Thus epigastric pain, of a burning or boring character, coming on two or more hours after eating, and relieved to some extent by taking food, is almost pathognomic of duodenal ulcer.

When pain is not so severe as to radiate, it is often referred by the patient to the neighborhood of the lesion; but in the presence of any epigastric pain of great intensity, the patient's statement as to its location is of limited value, as it is felt over a considerable area, both in front and in the back.

The pain of gastric ulcer may not be distinguishable from that of duodenal ulcer either in kind or in degree; but usually comes on earlier following a meal, and is not so constantly relieved by taking food. It is, however, usually relieved for a short time by taking bland, liquid food.

The pain caused by ulcer in the cardiac portion of the stomach or oesophagus is felt behind the sternum in front and at the corresponding level behind; and begins very soon after swallowing food. It is more intense when solid food has been taken. In fact this rule holds generally in all but duodenal ulcers.

The pain of peptic ulcer is described by different patients in various terms;

*Read before San Diego County Medical Society March 3, 1914.

the words burning, boring, grinding, piercing, shooting and many others being used. Such qualifying terms ought not to be allowed to carry too much weight; and I think it well to look with suspicion upon any epigastric pain or discomfort that carries with it the periodicity and relation to the taking of food, above expressed.

There are undoubtedly many ulcers where the patient suffers such slight discomfort as scarcely to merit the name of pain.

Like pain from some other causes, that of gastric ulcer is generally increased by the pressure of clothing.

This lesion also sometimes produces definite areas of sensitiveness to pressure; in fact, circumscribed areas of both sensitiveness and pain are often quite suggestive of ulcer. This is particularly true when these areas are located to the left of the 8th, 9th or 10th Dorsal vertebrae.

The increase of pain, artificially induced by the ingestion of HCl in proper dilution; or its relief by orthoform or anaesthesia is very suggestive of stomach ulcer.

While of frequent occurrence, and usually classed as one of the leading symptoms, vomiting, in ulcer, has frequently little to distinguish it from that accompanying many other conditions, near and remote. But the vomiting of material which gives evidence of blood, by visual, chemie or microscopic scrutiny, must always give rise to the suspicion of ulcer. Also the repeated detection of occult blood in the stools must be considered of diagnostic import.

Amounts of blood in either stool or vomit, sufficiently large to be readily recognized by the naked eye, are suggestive of advanced grades of ulceration, and in most cases testify to our neglected opportunities.

The rapid development of radiography has added to our diagnostics of

this as of many other conditions of the digestive tract. It is of value, not only in making a diagnosis, but also in locating the lesion. In fact for this latter purpose, it is many times indispensable.

As a diagnostic aid, the chemical examination of the gastric contents is not of as much value as commonly supposed. Although we still incline to the belief that in most cases of peptic ulcer, wherever situated, hyperchlorhydria has existed at some time during the course of their activity; yet we find cases presenting, some normal, some subnormal HCl acidity; with an occasional case of complete absence of free HCl.

The persistence of this latter condition, accompanying a history of ulcer, should suggest the possibility of developing malignancy at the seat of a previous ulcer.

Roughly we may say that more than half of the cases as they present themselves with a history suggestive of ulcer, will show a HCl acidity greater than normal.

From the purely diagnostic viewpoint, the most important study of the gastric contents is the search for pus and blood. In nearly all stomach ulcers, pus can be found if sought for carefully and often.

The finding of even a few red blood-cells is of diagnostic significance; while the inability to find any is more than offset by a positive chemical test for hemoglobin.

The knowledge of the presence of pus and blood in the stools should be used guardedly until their source can, at least approximately, be determined. In uncomplicated ulcer, the appetite generally remains unimpaired, although some patients appear afraid to eat. Stomach motility is usually increased; while constipation is the rule.

While in the great majority of cases of ulcer, the accurate localization of

the lesion is not an essential part of the diagnosis; still it is always of diagnostic interest, and sometimes of distinct advantage.

Areas of sensitiveness on the abdominal wall sometimes point directly to the seat of trouble; but care must be taken not to confuse these with reflex points of sensitiveness. Close observation of these areas of discomfort, particularly in regard to any influences exercised upon them by fasting, and by taking food of various consistencies, will usually aid our diagnosis. On the other hand, nature's signals here are sometimes misunderstood.

Postural changes which tend to bathe alternately different areas of the gastric mucosa in the fluid contents of the viscous often roughly localize the ulcer.

Roentgenograms, taken after Bismuth administration, promise to furnish the most accurate data on this subject of localization; but it demands an operator, trained to interpret the shadows, or they may strangely mislead.

With all respect to the men who have brought the gastroscope to its present stage of usefulness, I can not feel that, in its present form, we are justified in subjecting our patients to the ordeal of its scrutiny in any but exceptional cases.

Only a few months ago, speaking of the Janeway instrument, which is probably the most perfected one in use today, Chevalier Jackson said "that in order to overcome the technical difficulties of gastroscopy, the gastroscopist must be a mechanician." Even in such hands the present trend of its use is to aid in establishing a diagnosis of suspected early carcinoma, rather than in ulcer; and the very place where this is most important, namely, in the region of the pylorus; the instrument, thus far, has been unable to explore satisfactorily. Dr. Janeway, himself, says "the subject is still in its in-

fancy, and is susceptible of much improvement; but this much may be claimed: that we have in gastroscopy a practical means of diagnosing lesions involving the vertical portion of the stomach, especially the cardiac region."

It is always of diagnostic aid to remember that the ulcerative process is one subject to fluctuation, and that the rapidity both of advance and of healing varies greatly in different cases, and in the same case at different times.

Thus far, I have discussed uncomplicated peptic ulcer. Sometimes our attention is arrested chiefly by the conditions complicating a present ulcer, or those following in the wake of a closed ulcer.

As a not uncommon example of the former class, I would cite dilatation of the stomach with motor insufficiency and food retention, secondary to pyloric spasm, induced by an ulcer impinging upon the pylorus. Similarly an ulcer of the past, of which we may have had no knowledge, may in healing have formed a contracting scar at the pylorus, at the cardia, or elsewhere, capable of interfering with the proper functioning of the parts involved.

It is well to remember that stomach dilatation may follow stenosis of the pylorus or duodenum, due to adhesions between gall bladder and stomach or gall-bladder and bowel.

In some inflammatory conditions of the gall bladder, with or without stone, and in some appendicitis, the pain may somewhat suggest ulcer; but a close study of the pain recurrence, coupled with a leucocyte count, will usually remove the doubt.

Both persistent pylorospasm and persistent hyperchlorhydria may accompany gall-bladder disease as well as ulcer.

In cholelithiasis the history rarely pictures the regularity of attack or re-

lation to meals, associated with ulcer; nor is the pain so consistently relieved by taking liquid food into the stomach. The ability to palpate a sensitive gall bladder, or the passage of gall-stones in the stools, in some cases has aided the diagnosis.

While the pressure of clothing usually intensifies the pain of ulcer, it is unusual for the ulcer patient to complain of that sense of constriction independent of clothing, so often described by sufferers from gall-stones. The greater tendency of the pain to radiate to the right shoulder in gall-stones should also be borne in mind.

At times it is possible to confuse ulcer with other conditions of the same anatomic area. Occasionally a hyperchlorhydria of nervous, or let us say, undetermined origin, may give rise to burning distress, bearing a close relation to ulcer in time and periodicity of return and relief. The same may also be true in cases of hyperacid type of chronic gastritis. In neither of these conditions, however, unless the patient be quite hypersensitive, does he complain of actual pain; while the history and the microscopic examination of the stomach contents are usually enlightening.

Early carcinomata, at the time when it is very desirable to make the distinction, may simulate ulcer. Carcinoma, quite early presents loss of appetite, with probable repugnance to meat; facial pallor, if not beginning cachexia, and a steadily lowering stom-

ach acidity. As carcinoma progresses, which is only too rapidly, the difficulties of diagnosis disappear.

In conclusion, it is almost needless to say that the earlier we can make our diagnosis, the better for our patient.

Early cases are naturally most free from complications. In many such cases, the diagnosis can be made on the one symptom of pain, carefully analyzed. I consider the careful study of the pain history the most valuable single aid to diagnosis.

Let us not put too much weight on the absence of vomiting. Let us not be misled by the stomach chemistry. But in the presence of pain or discomfort, bearing the definite relation to the taking of food, characteristic of ulcer, and accompanied by pus, with or without blood, in the stomach contents; let us feel that we are dealing with ulcer in or above the pylorus. When the pain follows the meal by two or more hours, and is relieved by taking solid food, we are reasonably safe in diagnosing ulcer below the pylorus.

By following these rules, we may make a few mistakes in diagnosis; but mistakes of this kind, as a rule, do little damage; because practically all early cases are deserving of conservative medical handling; in the pursuance of which, we are placing our patient in the best possible conditions to enable us to correct a faulty or complete a provisional diagnosis.

1000 Watts Building.

DISARTICULATION OF THE HIP JOINT WITH REPORT OF CASE.*

BY H. W. MILLS, M.R.C.S., L.R.C.P., LONDON, ENGLAND; SAN BERNARDINO.

Disarticulation at the hip joint has always been regarded as one of the most serious operations of surgery; and will probably always be so regarded.

seeing that the usual indications for its performance are trauma, extensive tuberculosis of the upper end of the femur, gangrene of the limb after

*Paper read before the San Bernardino Medical Society March 3, 1914.

aneurism, previous unsuccessful resection of the joint, and sarcoma of the upper end of the femur.

Nearly one-fourth of the body is removed in this operation. The wound is a very large one and close to the trunk. The difficulty of controlling bleeding is—or I should say was before Wyeth's pins came into general use—great; and the subsequent shock very serious.

Lücke from his experience during the Franco-Prussian War, says that in cases of gunshot injury to the hip joint, expectant treatment, resection and disarticulation are alike disastrous.

He gives the following indications:

(1) Tearing off of the extremity high up, or extreme laceration of the soft part.

(2) When, together with severe injury to the bone, the vessels are torn.

(3) When, besides injury to the hip joint, the femur is extensively shattered.

The mortality in the Civil War was 93 per cent. Heyfelder quotes nine cases of gunshot injury with eight deaths, i.e., a mortality of 88.8 per cent.

From 1884 to 1895, collected statistics, from the Bellevue, Roosevelt, St. Luke's, Mt. Sinai, Chambers Street, German and Presbyterian Hospitals, gave a mortality of 44.4 per cent., or in cases operated other than by the Wyeth method 72.7 per cent. It is probable that the present mortality is not less than 10 per cent.—a high mortality now-a-days for any surgical operation.

To Wyeth undoubtedly belongs the credit of the improvement in technique whereby the mortality of this truly terrible operation has been reduced within bounds.

We will first of all consider the various types of operation that are, or in the past have been, in vogue:

(1) **The Transfixion Method:** I

show you here the knife with an 11-inch blade which used to be used in performing disarticulation of the hip by this method. I have never personally used this method, and only once—more than twenty years ago—seen it used. It was very spectacular and was performed as follows:

Davy's Rectal Lever was employed to control the hemorrhage by compressing the Common Iliac Artery. The exact position of the joint having been determined and the thigh slightly flexed and rotated outwards at the hip joint, the knife was introduced immediately below the anterior-superior spine of the Ilium, traveling parallel to Poupart's Ligament and through the anterior portion of the capsule, and emerging at the junction of the thigh with the perinaeum as low down as possible in the direction of the Ischial Tuberosity. An anterior flap six to ten inches long was then made, cutting downwards and upwards. Disarticulation of the head was effected, after cutting across the capsule and muscles transversely, and the latter seized by the surgeon's left hand and pulled forward while the posterior part of the capsule was divided, and the muscles inserted into the Great Trochanter cut close to the bone. Finally the posterior flap was made, the skin being cut two inches below the fold of the buttock. The vessels were now ligatured, those in the anterior flap having been manually controlled by the grasp of an assistant immediately after the anterior fold had been made.

(2) **Furneau-Jordan Method:** A modification of which is in use at the present day, in cases performed for conditions other than tumor.

(3) **The Verneuil-Rose Method:** In which the limb is dissected off as though it was a tumor.

The hemorrhage has always been regarded as one of the great dangers of this operation. We will now con-

sider the different means used to secure temporary Haemostasis during the disarticulation. They are as follows:

(1) Compression of the Abdominal Aorta.

(a) Manual.

(b) By Momburg's tourniquet, a rubber tube wound tightly round the waist midway between the crests of the Ilium and the lower ribs.

(3) Compression of the Common Iliac Artery.

(a) Digitally—McBurney.

(b) By Criles' clamp—Binnie.

Both methods of course requiring an abdominal incision.

(3) Compression of the External Iliac Artery by means of the Jordan-Lloyd tourniquet, applied over a roller bandage.

(4) Preliminary ligation of the External Iliac Artery.

(5) Preliminary ligation of the Femoral Artery.

(a) Through a separate incision.

(b) Through the anterior raquet incision.

(6) Pins.

(a) Tredelenburg's, one anterior transverse pin.

(b) Varick's, two pins, one anterior and one posterior.

(c) Wyeth's pins, the modern method.

(7) Forceps, Thomas', resembling a gastrectomy clamp, passed transversely through the thigh and compressing the vessels in the anterior flap.

(8) **Senn's Method.** In which a double india rubber ligature is led transversely through the thigh, and tied fore and aft.

At the present day the method of performing this operation most in vogue is Wyeth's, the steps of which are as follows:

(1) The limb having been emptied of blood by elevation only—as after severe crushing injuries—or elevation

followed by the use of Esmarch's bandage, applied in cases of tumor or septic conditions to within five inches only of the diseased portion, Wyeth's pins are introduced, and immediately thereafter corked. One enters one-quarter inch below and slightly inside the anterior-superior spine of the Ilium and emerges about three inches posteriorly on a level with the point of entrance, traversing skin muscle and fascia on the outer side of the hip, the other transfixing the skin of the tendon of the Adductor Longus one-half inch below the crutch, and emerging one inch below the Ischial Tuberosity. A solid pad of gauze two inches thick and four inches square is placed over the femoral vessels at the brim of the pelvis and the tourniquet tightly applied above the pins.

(2) A requet skin incision is made, the transverse portion some six inches lower down, and the flap of skin and fat dissected up to the level of the Lesser Trochanter.

(3) Circular division of the muscles to the bone, and ligature of the deep femoral and superficial vessels dissected up some three-quarters inch to catch any branches coming off immediately above the portion of the section.

(4) Shelling out of the bone from its muscular sheath, keeping close in the Digital Fossa and around the Trochanter.

(5) Exposure and division of the capsular ligament, rupture of the Ligamentum Teres, and dislocation of the head.

(6) Ligature of the Vena Saphena, Sciatic Obturator internal and external descending circumflex arteries, these latter the right and left of the femoral vessels.

(7) Light packing of the Acetabular cavity with 5 per cent. iodoform gauze, sewing of the muscles together with catgut, and closure of the skin with silkworm gut and horsehair.

CASE: The case which I am about to show you was that of a Mexican boy 18 years who was brought to the hospital in a very bad condition a month ago. The history was that thirteen months previously he had developed a swelling of his knee, for which an unsuccessful resection of the knee joint had been done.

As a result of extensive suppuration and rapidly declining health an amputation had been done four months after, just above the knee joint; and three months later as this wound also suppurated and his condition was in no way relieved, a further amputation was done four inches higher up—the wound again suppurated profusely.

He exhibited a livid, indurated, brawny, club-shaped stump, dotted around the extremity of which were the openings of five or six sinuses discharging copiously a watery pus, from the mouths of which pouted flabby watery-looking granulations; in his groin was a large mass of inflamed glands. His pulse was 120, and temperature 101 deg. Fahr. He was intensely anaemic.

I operated next day using Wyeth's pins and employing a combination of the Wyeth and Rose's methods, the mass of glands in the groin being as a preliminary step removed through a separate incision. It was necessary to remove much of the musculature as extensive lardaceous degeneration of the latter obtained.

The whole operation took three-quarters of an hour and as you see the stump is now soundly healed, temperature and pulse normal. He eats ravenously and feels strong and well, though he is still rather pale. He leaves shortly for Mexico where he proposes to take up the trade of a tailor.

Here is the bony specimen removed, as you see there is enormous irregular enlargement of the bone, and there are

four large perforations of the shaft.

The Greater Trochanter, the neck and part of the head are also diseased.

The Acetabular cavity was not, however, affected.

Here is an X-ray plate showing the great and irregular thickening of the bone.

Chamber of Commerce Building.

RULES FOR CONSUMPTIVES.

Acting under a law of 1912, the New Jersey State Board of Health has issued the following rules, which are to be followed by all consumptives in that State:

1. All persons suffering from pulmonary tuberculosis (consumption) shall effectively destroy their sputum (spit).

2. All persons suffering from running sores due to any form of tuberculosis shall burn all soiled dressings immediately after removal.

3. The room occupied by a tuberculosis patient shall have at least one outside window.

4. No person suffering from pulmonary or other communicable form of tuberculosis shall handle food designed for the use of others except when necessary in the performance of household duties, unless the food be wrapped in such a way as to protect it from contamination or unless some necessary subsequent process of preparation such as cooking will sterilize it and prevent its carrying infection to the consumer.

5. The manufacturing of any kind of goods for commercial purposes or the performance of any work known as "shop work" in the home of any person suffering from pulmonary or other communicable form of tuberculosis, is prohibited, unless the product is such as can be sterilized, and unless sterilization is done in strict accordance with the requirements of the local board of health.



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EDITORIAL

SANTA BARBARA MEETING.

The Forty-fourth Annual Session of the Medical Society of the State of California convened at Santa Barbara, April 14, 15, 16, 1914. The morning of the first day was devoted to a general business session, at which the Society received the President's address and the reports of various committees. President Mattison's address was the most interesting event of this session. It was like a glimpse into the future.

The afternoon of the first day was marked by a symposium on the relation of joint and endocardial affections to local infections. The cases of botulism up north were briefly described by Dr. Thomas Williams of Palo Alto.

The feature of the second day was the meeting of the California Association for the Study and Prevention of Tuberculosis. The morning session was devoted to scientific papers dealing with the medical aspect of tuberculosis, and in the afternoon the sociological and surgical papers received consideration.

An initiative petition, fathered by Dr. Robert A. Peers of Colfax, providing a fund of a million dollars for the fight against tuberculosis in California, received the signatures of the leading spirits among the tuberculosis men, and the Society expressed its sentiments in a practical way by voting to provide money for the printing of the petitions. The Shafroth-Calloway Bill, presented by the Los Angeles Society, was endorsed by the State Association. This bill was printed in full in the last issue of the Southern California Practitioner. During the business session, the Alameda County Society asked to be relieved from part of the National Tuberculosis Association percentage for the Red Cross Seals, on the plea of low finances. The State Tuberculosis Association decided that it could not alter the percentage of receipts that goes to the National Association, but voted a refund of part of its own receipts, in the case of the Alameda County Society to aid them in their financial embar-

rassment, with the understanding that such action was not to be construed as a precedent. Interesting. Dr. C. C. Browning of Los Angeles was elected President of the Tuberculosis Association, and Dr. George E. Tucker, Riverside, was re-elected Secretary.

In the general session, the morning of the second day was occupied largely by the gynecologists, and the afternoon by the internists. Thursday afternoon was marked by a symposium on gastroduodenal ulcer.

The Eye, Ear, Nose and Throat Section presented a good scientific program, as did also the Urological Section. Both these sections are doing good scientific work, getting away from the symposium stage and approaching original work along special lines.

The Fifth Annual Meeting of the California Association of Medical Milk Commissions met at the California State Normal School of Manual Arts and Household Economics, where they held a single session. Our knowledge of the milk supplies in this State would lead us to believe that there is ample work for this Association to do.

Probably the most interesting feature of the entire session was the action of the State Society regarding the State Accident Insurance Law. This law provides, in brief, that the employers shall pay the physicians and surgeons for attendance upon employees, insured under this act, at a minimum rate that is very low, ranging from fifty cents for mileage to twenty-five dollars for treating a compound fracture of the thigh. It is claimed that the medical men will be sure of their money, through this act, in cases that formerly were poor pay, so that the amount actually received will be greater than under the old regime. The average salary of those insured under this law is given as about one thousand dollars per year. However, practically any employee may be insured. The

question arose, whether the State Society should countenance its members receiving cases under the Insurance Law. This it decided to do, by a majority vote. Probably few of those voting at this session would care to receive cases at the minimum scale. However, in all fairness it must be admitted that the accident insurance people have shown an inclination to do what is right in allowing physicians a fair rate of compensation. The question of adoption of the law was not before the Society. Accident insurance is now a reality, and in all probability health insurance will follow. Under the circumstances, it would seem wise for the physician to meet these conditions, rather than to have them forced upon the profession. As matters stand now, members of the State Society may receive cases under the Insurance Law at a rate of compensation far below that heretofore recognized by our Society. These men are insured against malpractice suits, by the State Society. The Insurance Law exempts the employer from liability, so that in these accident cases the shyster lawyers will be tempted to try to induce the patients to bring malpractice suits against the physicians treating them. At any rate, in Washington, where a similar law is in operation, malpractice suits have increased ten-fold what they were before the operation of such a law. Should California have a similar experience, which is far from improbable, our State Society will be swamped with the expense incurred through defending malpractice suits. And doubtless a large number of those we will be called upon to defend will be members who are treating cases at a rate of compensation so low as to preclude the possibility of doing good work at a profit. Should this prove true, we believe the State Society should withdraw its malpractice defense from those members doing work at a rate of remuneration

lower than that recognized as necessary to insure good work being done. In the meantime, let us give the law a good, fair trial.

The following is the

FEE SCHEDULE.

These fees represent a minimum. Fees higher than Schedule will be approved when warranted by extraordinary difficulties encountered by the surgeon.

Unusual cases and procedures not specified are entitled to same fee as specified procedures of approximately equal magnitude.

Note.

Bills must be itemized, showing date of each visit, dressing or operation, and charge for same.

The is fully aware of the difficulties and inequalities of an inelastic Fee Schedule for surgical service. The Schedule here presented is designed for use in connection with medical services rendered an individual with an average earning capacity of \$1,000 per annum. To this class belongs the bulk of citizens which the Boynton Act is intended to protect and relieve.

First visit including report and first examination, in injury not otherwise specified \$2.00

Surgical dressings (materials) Specify Costs
 Mileage beyond city limits... 50c day, 75c night, 1 way per mile.

Assisting at Operation..... Major \$10.00
 Minor 5.00

Administering general anesthetic 5.00

Testimony as to fact of injury 10.00

Subsequent Visits
 Hospital
 or

Fractures. Operation. Home. Office.
 Reduction and First

Nasal Bones	\$10.00	\$1.50	\$1.00
Hand or Foot.....	5.00	1.50	1.00
Forearm—Leg 1 bone...	10.00	1.50	1.00
Forearm—Leg 2 bones...	25.00	1.50	1.00
Femur or Humerus.....	25.00	1.50	1.00
Clavicle or Scapula.....	15.00	1.50	1.00
Patella	15.00	1.50	1.00
Mandible or Maxilla	10.00	1.50	1.00
Pelvis	10.00	1.50	1.00
Ribs	5.00	1.50	1.00

(For compound fractures or fractures involving joints).....Add fifty per cent. to operation.

Dislocations.
 Easy reductions without anesthesia or assistants. 5.00 1.50 1.00
 Hip 10.00

Sprains.
 Large Joints, First Treatment 5.00 1.50 1.00
 Small Joints 2.00 1.50 1.00

Amputations.
 Finger or Toe..... 5.00 1.50 1.00
 Two or more 10.00 1.50 1.00
 Hand, Wrist, Forearm or Arm 25.00 1.50 1.00
 Shoulder disarticulation 40.00 1.50 1.00
 Foot, Ankle or Leg..... 25.00 1.50 1.00
 Knee or Thigh 40.00 1.50 1.00
 Hip disarticulation..... 75.00 1.50 1.00

Special Operations.
 Trephining or Resection of Skull 50.00 1.50 1.00
 Laminectomy 75.00 1.50 1.00
 Hernia, Radical operation. 30.00 1.50 1.00
 Hernia—by Taxis—Reduction and applying truss 5.00 1.50 1.00
 Paracentesis, Thoracic or Pericardii 5.00 1.50 1.00
 Tendoplasty 25.00 1.50 1.00
 Catheterization of Urethra 2.50

Foreign Bodies.
 Removal from conjunctiva (one or more)..... 2.00
 Removal from Cornea ... 3.00
 Enucleation of the Eye. 30.00 1.50 1.00

Minor Operations.
 Repair of small wounds (to 2½ inches) 2.50 1.50 1.00
 Repair of large wounds (over 2½ inches) 5.00 1.50 1.00
 Contusions, simple 2.00 1.50 1.00
 Contusions, extensive (several in different parts of body) 4.00 1.50 1.00
 Abrasions—Simple 2.00 1.50 1.00
 and Extensive, de-Burns pending upon severity of case.
 Abscess—incision..... 2.50 1.50 1.00
 Removal of small foreign bodies..... 2.50 1.50 1.00

STATE COMPENSATION INSURANCE FUND.

Instructions to Surgeons Caring for Injured Employees Whose Employers Are insured with the "Fund."

I. REPORTS:

A. To the Commission. The "Pink Blank" is required by law, for Statistical purposes of every physician treating an industrial injury.

B. To the State Compensation Insurance Fund. The "Yellow Blank" for insurance purposes, is required of every physician treating an industrial injury, where the employer is insured in the State Compensation Insurance Fund. This is required at the beginning of the treatment.

C. Itemized bills in duplicate are required at the close of the case for statistical purposes and in order that payment may follow.

NOTE: Bills may be sent during progress of the case for partial payment if so desired.

D. Other reports: Will be asked for if wanted. This applies to the more severe and protracted cases.

NOTE: Final reports are not necessary except when indicated. Correspondence is solicited at all times, and information will be cheerfully given.

II. REFEREE CASES, INSPECTION CASES.

Surgeons are not expected to act in these capacities without instructions from the Medical Department or from a member of the Commission or officers of the State Compensation Insurance Fund. The information required will be designated. Fees will be prearranged. This does not signify, however, that the Commission will not greatly appreciate voluntary information and suggestions regarding the care of a case, character of surgeons, equipment and conduct of hospitals. Such information is invited.

III. ELIGIBILITY FOR WORK UNDER FUND:

A. According to agreements had by the Industrial Accident Commission, State Compensation Insurance Fund, the State Medical Society, and the Insurance Companies, any licensed practitioner of medicine and surgery may care for cases of accidental injury coming under the "Fund," unless in the opinion of the Medical Dept., he is unsuited for the work.

The Industrial Accident Commission has the authority of the law to remove a patient from any surgeon whose limitations do not promise good results, or who has become obnoxious.

B. Authority: A surgeon assuming charge of an accident case under the "Fund," should treat it as his best judgment dictates. If he does not care to assume responsibility single-handed in a severe case he is authorized to secure consultation from among other surgeons available. He may place his patient in a hospital, if that is to the best interest of the patient, and may secure a private room and private nursing if patient's chances of recovery would be jeopardized by lack of the same. He may incur expense of transportation, operating room, assistance, anesthetic etc., at the rates approved by the Commission. X-ray pictures are required in all bone cases. Pictures to be filed with the Medical Director.

Telegraphic or telephonic communications, if required, may be charged to the "Fund." In all instances where more than ordinary care or expense is involved, it is necessary that the medical department be advised, if not before incurring the expense, at any rate, as soon after as practicable. Conservative surgery is fervently desired. As a business proposition, an expensive tedious hospital treatment to repair an injured member is less expensive to the insurance carrier than protracted or perpetual indemnity following amputation.

NOTE: The surgeon in charge of the case of the "Fund" is the representative of the "Fund" and as such has authority to enforce discipline on his patient. Any patient, who, through his acts, delays or endangers his recovery, against the advice of his physician, jeopardizes his chances of recovering indemnity. In this matter, again, correspondence is solicited.

"OUR" JOURNAL.

Some of the methods of the supporters of the Jones journal were rather amusing and decidedly undignified. For instance, the appeal to any members contemplating buying an automobile, that they send word to Jones, stating the machine they wish to invest in, so that he may use such information to induce the firm to advertise in "our" journal! Speaks well for the dignity of the profession, doesn't it? We are assured that "our" journal is a paying proposition, and at the same time we are told that we must become advertising solicitors of a decidedly questionable sort in order that it may live!

The report of the Legislative Committee will need considerable pruning before its appearance in "our" journal. The members were freely told that they "acted like a lot of frightened sheep" during the recent session of the State Legislature. You would think our profession had lost its traditional dignity. As a matter of fact, what support could our Legislative Committee expect from the profession of the State, when they carried on their legislative campaign with such secrecy that the profession at large throughout the State did not know what they were doing or attempting to do. And what did they do? Spent some time and money. We never did like these secret campaigns. They are decidedly un-American and very far from the true California spirit; quite at variance with the methods of the leaders of preventive medicine. Never did like to hear any little sap-headed attorney or misguided doctor revile the honorable members of our profession.

The new officers of the State Society are Dr. Harry Sherman, San Francisco, President; Dr. George H. Hare, Fresno, First Vice-President; Dr. Rexwald Brown, Santa Barbara, Second Vice-President; Dr. Philip Mills Jones, San Francisco, Secretary. The next meeting will be in San Francisco.

THE KALLIKAK FAMILY AND THE MENDELIAN LAW.

Hon. Lathrop Brown, member of Congress from New York, in a recent address on the dangers to our nation from the admission of defectives, degenerates and criminals, presents a valuable resume of the importance of heredity. He says:

"The Mendelian law is named after its discoverer, an Austrian monk called Gregor Mendel. In his garden, in the year 1866, he made some experiments, crossing tall and dwarf peas, and found that the tall peas contained a 'dominant' character which the dwarf peas lacked. They were 'recessive' for the lack of that element which makes the tall peas tall. Mendel crossed the tall with the dwarf, and in the first generation all were tall peas. He then permitted these tall peas that had a single or simplex 'recessive' strain to fertilize themselves, and found in the second generation three tall peas to one dwarf pea, and so on through subsequent generations. This law, though lost sight of until 1900, has since then been found to apply to the color of the hair, albinism, brachydaactylism, and to other human traits. As I said before, Dr. Rosanoff has not only made certain of the application of the Mendelian law to the inheritance of feeble-mindedness, but in so doing has for all time put the normal mind in the 'dominant' class and the feeble mind in the 'recessive' class. It is comforting to have the odds 3 to 1 in one's favor even after the first generation.

"Dr. Rosanoff hunted up the antecedents of some hundreds of patients who were confined in the Kings Park (N. Y.) State Hospital for the Insane, made out a table of expectancy based on the Mendelian law, and arrived at these results:

"Of the 64 offspring of 17 matings all of whose parents had the neuropathic constitution, according to the Mendelian law all these 64 children would be neuropathic. Dr. Rosanoff found but 54 who were neuropathic, although 8 are still too young to be determined.

"Of 169 children of 37 matings one of whose parents in each case had the neuropathic constitution, according to the Mendelian law 84½ would be neu-

ropathic. Dr. Rosanoff found 84 neuropathic and 85 normal, and so on."

In regard to the descendants of Martin Kallikak Mr. Brown says:

"During the year 1913 just passed there appeared a book called *The Kallikak Family*. This is the pseudonym of a family on whose illegitimate side in the sixth generation is now a girl called Deborah in an institution for the feeble-minded at Vineland, N. J. In the course of the usual investigation into the heredity and environment of the patient, this startling fact was discovered: Just prior to the Revolutionary War one Martin Kallikak, a young man of very good family, had, by the feeble-minded daughter of an innkeeper, an illegitimate son. A few years later Martin Kallikak married a normal woman of his own station in life, and their descendants to the present sixth generation have been estimable citizens, proudly bearing one of the most honored names in the commonwealth of New Jersey. So, starting with Martin Kallikak, we have presented two branches of a great family, starting from the same head, the one branch normal, strong, creditable, an asset to the State; the other weak, feeble-minded, discreditable, a continuing liability to the State; the one whose membership comprises business and professional men of the highest repute, the other branch of the same name of whose 480 known direct descendants 143 have been feeble-minded and but 46 normal, with the rest unknown or undetermined. Can there be any doubt of the heritage of feeble-mindedness? A mere glance at the sinister Kallikak record of illegitimacy, harlotry, alcoholism, incest, and crime is sufficient.

"Now, if feeble-mindedness is hereditary, along what lines does it show itself? If there were any doubt of this hereditary quality, we should scarcely expect to find the known law of biology—the Mendelian law—to be its method of transmission, yet so it is—as in plants, so in people."

When we realize these facts we see not only the importance of protecting the great American Melting Pot by keeping out all alien feeble-minded, degenerates and criminals, but also the urgent necessity of upsexing the members of those classes we already have with us. Several states have followed

the lead of Indiana in adopting laws for sterilizing the undesirable, but we should have national laws controlling such matters.

Mr. Brown is evidently wide awake to conditions along these lines and it would be wise for physicians to address him, care of House of Representatives, Washington, D. C., and secure a copy of his illuminating speech and also urge upon him the necessity of national legislation unsexing idiots, degenerates and confirmed criminals. America does not want duplicates from any of these classes.

DR. GARRE AND THE THYROID GLAND.

Dr. C. Garre, director of surgery at the University of Bonn, Germany, recently spent several days in Los Angeles. He was the guest of honor at a reception given by Dr. Norman Bridge where members of the profession had an opportunity to greet him. While here he was interviewed by the Los Angeles Examiner. In the course of this interview Dr. Garre said:

"Undoubtedly the transplantation of the thyroid gland will revolutionize the work of the social worker within a few years. Crime, idiocy, the lack of development in children, degeneracy, will be lessened to an inconceivable degree through the knowledge of this remarkable organ which is just dawning upon us.

"To the thyroid gland, situated in the throat, has been traced thousands upon thousands of cases of stunted growth, of mental undevelopment, of idiocy and such like defects. An undeveloped thyroid gland means an undeveloped child.

"Let us take the case of father and son. The father has a normal thyroid gland, the son's is undeveloped, therefore he is making no progress physically or mentally. Now then, we can remove one-third or even two-thirds of the father's gland without injuring him in the least and by transplanting this to the son can bring him to positive normal development in a remarkably short period of time.

"Already this is being done in more

or less of an experimental stage. In a year or so the process will be world-wide and unfailingly successful in case a correct diagnosis has been made."

HELP HECTOR ALLIOT.

Mr. Hector Alliot, curator of the Southwest Museum, whose address is now 320 West Eighth street, Los Angeles, is endeavoring to secure a complete file of the Southern California Practitioner for the Historical Section of the museum.

Mr. Alliot needs all of Volume I; numbers 1-2-3-4-5-6-7-8-11 of Volume II; all of Volume III; numbers 5-10-11 of Volume IV; numbers 1-2-12 of Volume V; numbers 8-12, Volume VII; numbers 2-3-4-6-8 of Volume VIII; numbers 1-3-4-7-8-9-10-12, Volume X; number 2, Vol. XI; numbers 1-2-3-6-7-8-12 of Vol. XII; numbers 1-2-3-7-9-10-11 of Volume XIII; numbers 1-3-5 of Volume XIV; number 6 of Volume XXII; and all of Volume IX.

Even though you have only one number of the desired magazine it is worth while to mail it to Mr. Alliot. There is no place where these files will be better preserved or more accessible than in the Southwest Museum.

The board of directors of the museum, of which Dr. Norman Bridge is president, will formally and gratefully acknowledge any assistance you may render in this matter.

SUICIDES IN THE UNIVERSITY OF PENNSYLVANIA.

In the April issue of the Southern California Practitioner we spoke of the "uncanny" number of child suicides in the schools of Germany, as reported by Dr. Fritz Berlozheimer, but we now write of similar matters nearer home. The authorities of the University of Pennsylvania have been shocked recently by the suicide of several students in that institution. To counteract this terrible tendency Provost Smith has secured the services of Billy

Sunday on the regular teaching staff of the university. Provost Smith says:

"After the suicides I could not sleep. The shock of the first suicide depressed me, the second unnerved me, and the third left me with that feeling of having suffered from great loss.

"The suicides caused me many moments of deep thought. I wondered what there is lacking in a college life that left the young men with no resources to tide them over the shoals and sorrows of life and guide them to a safe port. I tried to think of possible ways to lead the students from the channel that was sweeping them to self-destruction, and I decided it would be necessary to lift the minds of the students away from their imaginary troubles to the contemplations of their Creator.

"Billy Sunday came to my mind, and I immediately proceeded to carry the thought into effect. The enthusiasm the students showed over him was a revelation to me, and the results exceeded my fondest expectations.

"I would prefer to turn out young men imbued with a desire to live righteous lives and with only a modicum of learning rather than the most learned and accomplished 'good-for-nothing' in the world."

Freshness of raw material is one of the essentials in the manufacture of organotherapeutic agents. First-class products can only be made from glands and membranes that are put into process before deterioration has started. Armour's facilities for collecting and manipulating Thyroids, Pituitaries, Corpus Luteum and such things are unequalled, and that is why finished medicinal preparations of animal origin under the Armour label are dependable. There is another thing that the physician should never forget, and that is that the glands, membranes, etc., used

by Armour and Company are all taken from animals that are federal inspected before and after killing.

REGISTRATION WITHOUT EXAMINATION.

The board of directors of the California State Nurses' Association wish to remind the nurses of the State that the time of waiver for registration of nurses in this State closes July 1, 1914.

The time between the date the Registration Bill went into effect and July 1, 1914, was allowed for nurses who wish to register without examination. After July 1, 1914, those registering will be required to take examination under the direction of the Bureau of Registration of the California State Board of Health.

What registration means to the nurses is demonstrated by the fact that thirty-five States have registration for nurses and there are many more States working to get bills passed by the Legislature. If we would keep up with the advantages and opportunities offered us in the nursing world we must be "Registered Nurses,"—R. N.

Registration has been obtained in every instance by the co-operation of nurses through their organizations. It is now necessary to protect all legislative measures pertaining to nurses and this can only be done by the unified and continuous efforts of a large and active number of nurses.

Therefore, we take pleasure in reminding the nurses of this responsibility and opportunity to register now. Send at once for application blanks to Miss Anna C. Jamme, Director of Bureau of Registration, California State Board of Health, Sacramento, California.

LAURA L. MITCHELL,
President California State Nurses' Assn.
MRS. B. TAYLOR, Secretary,
126 Ramsell St., San Francisco.

EDITORIAL NOTES

Dr. Fred. J. Barnet has opened an office in the Bullard Block.

FOR SALE—Wagner static machine, good as new. 834 Security Bldg.

Dr. E. J. Cook of the H. W. Hellman Building is spending a few weeks with the Mayos, Rochester, Minn.

FOR SALE—By owner, on reasonable terms, a 9-room house in a high, slightly and healthful location. An ideal location for a private hospital or sanitarium. Boyd, 1049 W. 24th St.

The library of the late Dr. Charles B. Nichols is for sale. Those interested may receive information through Dr. Duffield, 423 Auditorium Building.

WANTED—To exchange a new portable X-Ray Coil and complete line of Accessories for a second-hand automobile. Dr. Fred Bowen, 124 W. Fourth St., Los Angeles.

FOR SALE—Four (4) K. W. Snook X-Ray apparatus for direct current, very cheap. Reason for selling is inability to get direct current. Good as new. Address No. 44, care of Southern California Practitioner.

WANTED—Medical man of wide experience located in outskirts of city desires work assisting busy practitioner in office work or laboratory afternoons. Remuneration secondary consideration. Answer Medico, this office.

Fifty thousand worn-out horses are shipped each year from England to the continent to be butchered for food. Thirty thousand of these horses are slaughtered in Antwerp. Horse meat is quite a satisfactory substitute for beef and rates higher than dog meat, which is used extensively in Germany.

The El Reposo Sanatorium at Sierra Madre, remodeled, enlarged and fur-

nished with new equipment, will reopen June 1st, 1914, under new management as a modern and thoroughly equipped institution for the scientific treatment of tuberculosis. Dr. Charles A. Shepard has assumed charge of the institution as medical director.

Dr. and Mrs. W. W. Roblee of Riverside gave a dinner at their residence the first evening of the session of the Southern California Medical Society. The dinner was in honor of Dr. and Mrs. Egan Ranzi of Vienna, Austria. Dr. Ranzi is professor of surgery in the University of Vienna, and read a paper before the Southern California Society on Extirpation of the Spleen for Anemia.

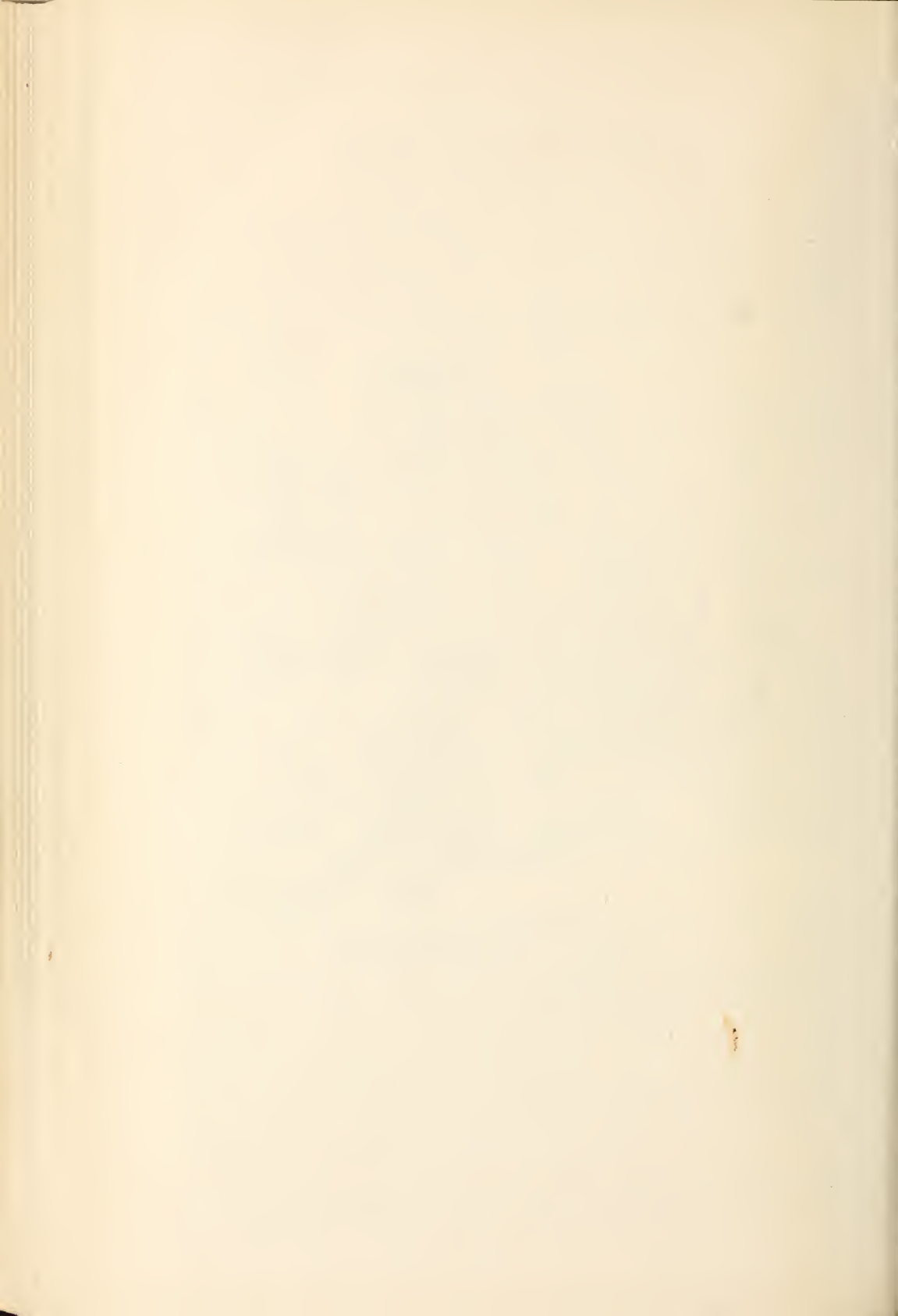
Dr. Melville LeRoy Loomis of Los Angeles and Miss Charlotte Margaret Holmes were married at the residence of the bride's parents, Salt Lake City, Utah, on Thursday, the 23rd of April. Dr. and Mrs. Loomis, as from year to year they happily celebrate with poetic sentiment the anniversary of their wedding, will also be commemorating the birthday of Wm. Shakespeare, the world's greatest poet.

The graduation of seven nurses from the Riverside Hospital Training School was a delightful occasion. Dr. W. A. Hunter delivered an interesting address and Miss M. J. Currie, the Superintendent of Nurses, presented the diplomas to the young women with fitting remarks. Following the exercises Dr. and Mrs. H. R. Martin entertained the nurses and their talented superintendent with refreshments and music at their residence.

Oliver Goldsmith, poet, playwright, novelist and physician, received the degree of Bachelor of Medicine from the



THE AWFUL AMERICAN MEDICAL TRUST



University of Dublin and later from Oxford University. He studied medicine 2½ years at the Edinburgh University, 1 year in the University of Leiden, where he specialized in chemistry under Gaubius and in anatomy under Albinus, and finally he studied 6 months at the University of Padua, Italy. He died in London, April 4, 1774, age 46.

Exceptionally good opening in Los Angeles for properly qualified M.D.; well known surgeon-physician is giving up city residence for suburban home and desires congenial man to take practice as associate; down-town offices in one of the best buildings; practice should run several thousand dollars per year right from the start. Right party can step into this by simply purchasing the city residence at its actual worth; can be handled on as little as \$4000 cash. Answering, please state qualifications and references. Address No. 45, care of the Southern California Practitioner.

Dr. W. V. Whitmore of Tucson, Arizona, has just been appointed a member of the Board of Regents of the University of Arizona by Gov. Geo. W. P. Hunt. Dr. Whitmore was recently elected, without opposition, to his fourth term as a member of the Board of Education at Tucson. At the annual organization of the Board he was, for the sixth time, elected president. Dr. Whitmore will be remembered by many of the older Los Angeles physicians, as he graduated from the University of Southern California in 1890 and served a term as interne at the County Hospital. He has resided in Tucson for 22 years.

INDIANS AND TUBERCULOSIS.

Dr. John N. Alley, Superintendent of the United States Sanatorium for Indians at Fort Lapwai, Idaho, says he is

convinced, after a study of the causes of death among the Nez Perces Indians for the last ten years, that 90 per cent of all the deaths are due directly or indirectly to tuberculosis. In the hundred years that have elapsed since the historic expedition of Lewis and Clarke to the Northwest, the Nez Perces tribe has diminished from 8,000 to 1,300. The present tuberculosis death rate is about 40 per thousand living or two and one-half times the rate in the United States as a whole. Dr. Alley traces the cause of the decimation to the change in the mode of living of the Indians from the open-air life of the plains to the sedentary, settled life of the reservation. The latter has brought with it the danger of house infection which was automatically eliminated in the earlier days. "Ventilation," says Dr. Alley, "is completely foreign to an Indian's nature. It is with great difficulty that you can get them to pay any heed to this important part of sanitation. I have known twenty or thirty to gather in a small room where an advanced case of tuberculosis has been housed for months, and to close all the doors and windows, even plugging up the keyholes."

In a recent report of the office of Indian Affairs, Commissioner Sells points out that there are approximately 25,000 Indians in the United States suffering from tuberculosis, and that the available government facilities for their care will not exceed 300 beds.

RECOGNITION FROM ABROAD.

According to a dispatch to the New York Sun, the London Times, discussing a lecture on "cancer houses" by Sir Thomas Oliver, took occasion recently to comment favorably on the organization and methods of the American Society for the Control of Cancer, and suggested that a similar national movement be undertaken in England.

BOOK REVIEWS

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES. Embracing the entire range of Scientific and Practical Medicine and Allied Science. By various writers. Third Edition, Completely Revised and Rewritten. Edited by Thomas Lathrop Stedman, A.M., M.D. Complete in eight imperial quarto volumes. Volume III. 934 double column pages, illustrated by 659 engravings and 7 full-page plates in colors. Wm. Wood & Co., New York.

The third edition of the Reference Handbook, which has been called "the most popular medical book ever published," bids fair to gain even greater popularity than was enjoyed by the first and second editions. The third volume, just issued, is, if anything, superior to Volumes I and II. Of the 539 individual articles contained in Volume III, it is manifestly impossible to mention more than a few, but several of these are conspicuous for their especial excellence, such as: Dislocations; Embryological articles; Criminology; Asexualization of Criminals and Defectives; Cranial Nerves; Surgery of the Colon; Colon Bacillus Infections; Diseases of the Eye; Huntington's Chorea; Color Perception and Tests for Color Blindness; Diabetes; Electrocoagulation; Electrodiagnosis; Diathermy; Dysentery; Dermatitis; Disinfection; Articles on *Materia Medica*, Health Resorts and Mineral Springs; Biographies of Physicians of Ancient and Modern Times. A great number of very short definitions of terms more exhaustively treated in other articles, is a feature of great usefulness. In mechanical make-up, the book would be hard to excel. The paper is excellent, the illustrations of a high grade, both the cuts in the text and the colored plates.

The following article, by Dr. Robert Coleman Kemp, serves as an illustration of the practical nature of the myriad of short articles in this edition.

Treatment of Infection by the Bacillus Coli.—In my own experience final

cure of my patients was secured only by the persistent use of urotropin and sodium benzoate in large doses during the acute stages, eighty grains of each daily, subsequently diminishing the dosage. I know of one case, acute meningitis, in which as much as 120 grains of urotropin was given in divided doses during twenty-four hours for several days, with successful results. I have information of another case where 240 grains was given for a period of twenty-four hours. Renal irritation with blood in the urine resulted. This immediately cleared up on stopping the urotropin. If renal congestion occurs at any time from pushing this remedy, stop administration for twenty-four hours, give cream of tartar lemonade, and return to smaller dosage. Hexamethylenamine I have found not as satisfactory and more apt to derange the stomach. I do not believe it as strictly standardized as the German preparation.

The general treatment may be summarized as follows:

(1) Urotropin and sodium benzoate aa gr. x every three hours by mouth; by rectum, if there is vomiting or coma. Total eighty grains of each daily.

After prolonged use, if there is excessive acidity with irritation, omit the sodium benzoate and give Vichy or potassium citrate with the urotropin.

Subsequently regulate the urine so as to be neutral or faintly acid. Diminish dosage as condition improves.

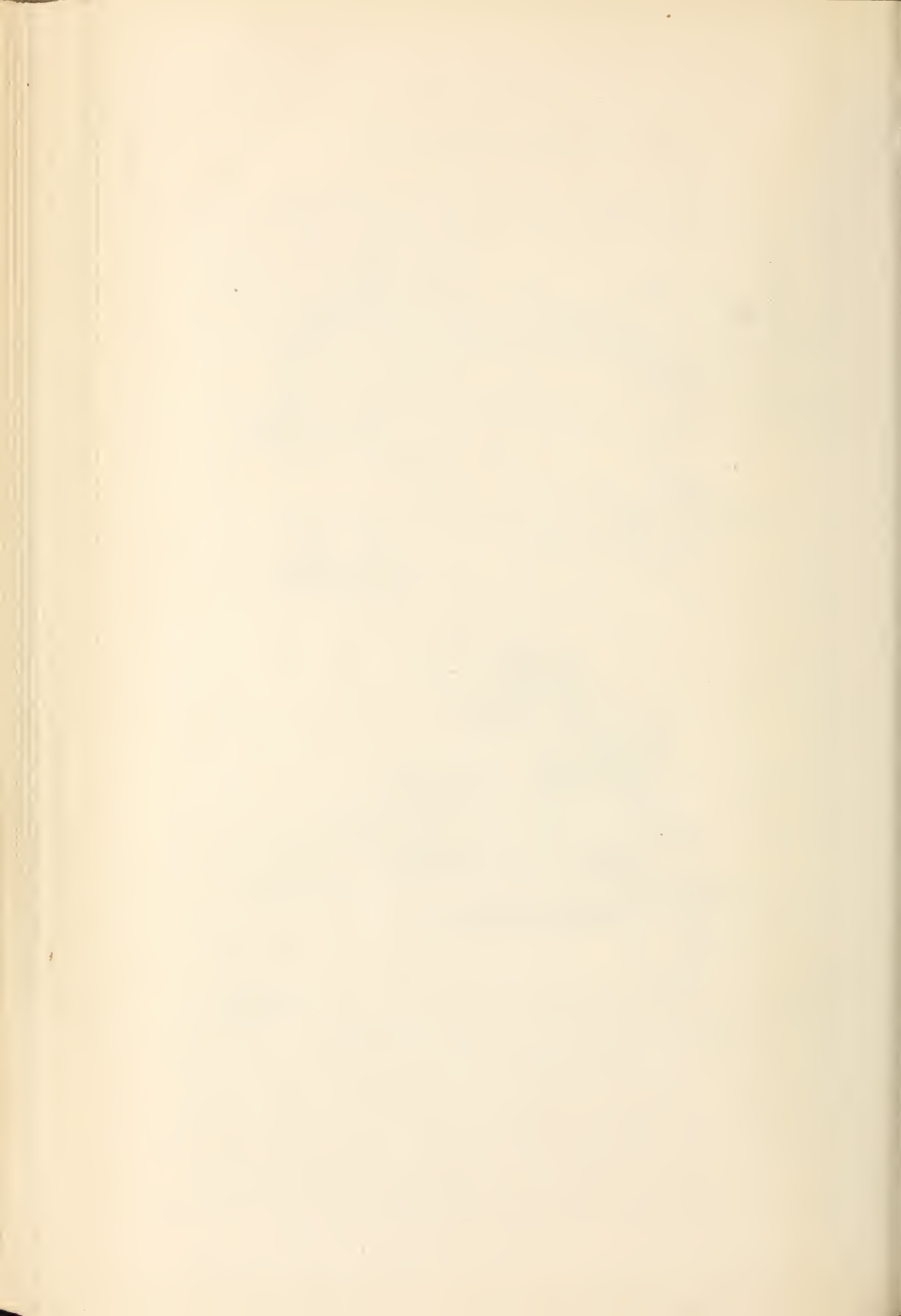
(2) Autogenous vaccines, especially if the infection is chronic, or does not respond to treatment, are of value. Begin with 100,000,000 of the vaccine bacilli, increasing to 300,000,000 to one billion, gradually, first every two or three days, or larger doses at longer intervals—four to seven days. I have seen the vaccines improve the clinical



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES

Chadlow

SEVERAL REASONS WHY FLIES SHOULD BE
UNWELCOME GUESTS.



symptoms, but they did not eradicate the colon bacilli. The urotropin proved successful in this regard.

(3) Lactic acid bacillus cultures should be given internally, preferably the liquid, three to six tubes daily. I generally employ these in the subacute and chronic cases. Several hours should elapse between the urotropin and lactic acid bacilli preparations.

(4) High enemata, 1-1,000 acetone, every day, and later every other day.

(5) Sour milk diet, later cereals, etc. Avoid red meats.

(6) Bowels should be opened at once by calomel or blue mass, and then regulated carefully every day.

(7) Dudgeon recommends the use of antibacillus coli serum in doses of 25 c.c. spread over seventy-two hours, but so far the method has not been sufficiently tried to recommend it.

After recovery from the acute infection, one must remember that colon bacilli infection is characterized by chronicity and by tendency to recurrence.

The work throughout is reliable and practical, forming a most useful reference handbook for the practitioner of the healing art.

THE DIAGNOSIS AND TREATMENT OF DIGESTIVE DISEASES. A Practical Treatise for Students and Practitioners of Medicine. By George M. Niles, M.D. Professor of Gastroenterology and Clinical Medicine, Atlanta Medical College; Gastroenterologist to the Georgia Baptist Hospital, Wesley Memorial Hospital, Atlanta Hospital; Consulting Gastroenterologist to the Anti-Tuberculosis Association, Atlanta, Georgia. With 1 Colored plate and 86 Other Illustrations. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street. Price \$5.00 net.

The author has cut the Gordon knot, presenting a treatise that is ample, brief, concise and readable. Diagnosis and treatment are given special attention throughout the volume. The first chapter bears the rather striking title: "Getting in touch with the patient."

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ELECTRICITY IN DISEASES OF THE EYE, EAR, NOSE AND THROAT, WITH ILLUSTRATIONS. By W. Franklin Coleman, M.D., M.R.C.S., Eng. Ex-President of and Professor of Ophthalmology in the Post-Graduate Medical School of Chicago. Ex-President of the Ophthalmological Society of Chicago. Professor of Ophthalmology in The Illinois School of Electro-Therapeutics, Chicago. 595 pages, 156 illustrations. The *Courier-Herald Press*. 1912. Price, \$5.00.

There are probably few physicians without some knowledge of the use of electricity, and few physicians in practice without some sort of electric equipment. Likewise, there are probably very few eye, ear, nose and throat men who will not find much of practical interest in this treatise on electricity in diseases of the eye, ear, nose and throat. The Chapter on Physics of

Electricity should interest all physicians. In the body of the work, the writer tells tersely and clearly what may be expected in the way of results, and exactly how the best results may be secured. The illustrations are clear and well selected. It is a work well known among electro-therapeutists, and it will doubtless have a large sale among the eye, ear, nose and throat men and also the men in general practice. We take pleasure in recommending it to our readers.

TREATMENT OF CHRONIC LEG ULCERS, A PRACTICAL GUIDE TO ITS SYMPTOMATOLOGY, DIAGNOSIS AND TREATMENT. By Dr. Edward Adams. 122 Pages. Cloth \$1.00. Published by The International Journal of Surgery Company, 100 William Street, New York City.

Traumatic, varicose and syphilitic ulcers of the leg receive ample treatment in this small monograph, which is well illustrated and charmingly written.

BIOCHEMIC DRUG ASSAY METHODS with Special Reference to the Pharmacodynamic Standardization of Drugs. By Paul S. Pittenger, Ph. G., Ph. C., Phar. D. Instructor in Pharmacodynamics, Departments of Pharmacy and Chemistry, Medico-Chirurgical College, Philadelphia; member of the "Committee on Physiologic Testing" of the American Pharmaceutical Association; member of the American Chemical Society, American Pharmaceutical Association. Edited by F. E. Stewart, M.D., Ph. G. Professor of Materia Medica and Botany, Departments of Pharmacy and Chemistry, Medico-Chirurgical College of Philadelphia; Charter member of the American Therapeutic Society; Chairman of the Section on Materia Medica and Pharmacy of the American Medical Association; Associate Editor of the Therapeutic Gazette; Editor in Chief of Merck's Archives. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street. Price \$1.50 net.

This work is especially useful since it explains in sufficient detail the methods and apparatus used for pharmacodynamic standardization. Many drugs, such as digitalis, ergot, cannabis indica, etc., do not lend themselves to standardization by chemical methods. It is with this class of drugs that this volume exclusively deals. This Manual,

though intended primarily for the use of the pharmacist and pharmaceutical chemist, could be advantageously employed in teaching medical students.

THE JUNIOR NURSE. By Charlotte A. Brown, R. N., Instructor in the Boston City Hospital; Graduate of the Boston City Hospital and Boston Lying-in Hospital Training Schools for Nurses; late Superintendent of the Hartford Hospital Training School, Hartford, Conn. 12 mo., 208 pages, illustrated. Cloth, \$1.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

Brown's Junior Nurse is a volume full of valuable information which is particularly useful to the beginner, and which is sure to be of service not only throughout the entire course in the training school, but afterwards in actual nursing of any kind. The book is characterized by clearness and simplicity. In the presentation of each topic the clinical features are emphasized throughout. The volume opens with chapters on the Qualifications of the Nurse, and her Personal Hygiene, on Bed Making and the Admission of Patients. Then follow discussions of all of those subjects, a knowledge of which is necessary for the discharge of the nurse's everyday duties. The sections on Bandaging, on Emergencies and on Infectious and Contagious Diseases are worthy of special attention. A convenient glossary is placed at the end of the volume. The illustrations are extremely helpful, especially those in the section on bandaging.

CHICAGO MEDICAL SOCIETY.

The Chicago Medical Society will hold its Third Annual Meeting of Alienists and Neurologists of the United States, for the discussion of Mental Diseases in their various phases, July 14th to 18th, 1914.

It is the object of the Society:

First.—To have a scientific program. The titles of papers already received for this meeting, indicate such a program, including research work, that will be beneficial to every physician,

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whether connected with an Asylum, Sanatorium, or in general practice.

Second.—One that will be educational to the public as well, therefore, one day is to be devoted to the discussion of the prevention of insanity and the conditions causing Mental Defectives, to which the public will be invited.

Committees have been appointed to report on the causative factors, in acquired Insanity and Inherited Mental Defectives, from Alcoholism, Epilepsy, Infectious Diseases, especially Syphilis, and the effect of environment upon Mental Defectives, in their relation to Criminology.

Resolutions will be introduced and discussed, for the framing of such laws, that will, in a reasonable measure, prevent these conditions, and such resolutions will be presented to the various State Legislatures, and the National Government for their consideration.

Third.—A committee will report on

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what constitutes a Modern Hospital or Asylum, and what the duties of the State to the Physician who makes the care of the Insane and Mental Defectives a specialty.

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reader is advised to turn to this announcement, which should prove of interest and value to every practitioner who faces the problem of amylaceous dyspepsia.

A word here with reference to the therapeutic application of Taka-Diastase may not be amiss. The product may be prescribed with advantage in the treatment of any pathological condition in which the salivary digestion is inhibited or impaired—in any case of gastric or intestinal disorder in which the starches are digested with apparent difficulty. It is employed with good results in the dietetic treatment of subacute and chronic gastritis; in infantile diarrhoea, especially in cases in which the diarrhoea alternates with constipation; in malnutrition or inanition; in the vomiting of pregnancy; in diabetes due to pancreatic disease.

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SOUTHERN CALIFORNIA PRACTITIONER

Vol. XXIX.

LOS ANGELES, JUNE, 1914.

No. 6

Editor,
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TUBERCULOSIS NURSES

BY GEORGE E. MALSBARY, LOS ANGELES

Secretary of the Los Angeles Society for the Study and Prevention of Tuberculosis,
Author of a Textbook on The Practice of Medicine.

The weekly bulletin of the Department of Health of the city of New York has upon its title page the succinct statement that "Public health is purchasable. Within natural limitations a community can determine its own death rate." In the vital statistics of the principal cities of the United States for the year 1912, Los Angeles was accredited with the highest death rate from tuberculosis, 226.9 per hundred thousand.

Recent reports show that the anti-tuberculosis campaign in New York has borne fruit, there being a reduction of more than one-fourth in both the cases and deaths from tuberculosis in that city.

In New York City there was a steady increase in the number of cases of tuberculosis up to 32,065 in 1910, and a subsequent decrease to 24,513 in 1911; and 22,652 in 1912. The New York mortality figures would seem to indicate that the anti-tuberculosis campaign in New York City had begun

to bear fruit. The death rate from pulmonary tuberculosis in Manhattan and The Bronx fell steadily from 427 per hundred thousand in population in 1881 to 190 per hundred thousand in 1912, a reduction of 55 per cent. In Greater New York the deaths from pulmonary tuberculosis have decreased from 225 per hundred thousand in 1898 to 166 per hundred thousand in 1912. Although the population of Greater New York has increased from 3,272,418 in 1898 to 5,173,064 in 1912, the deaths from pulmonary tuberculosis were 8591 in 1912 as compared with 7724 in 1898, and the bulletin of the Department of Health of the city of New York for May 3rd of this year, page 3, stated that it may with fairness be held that the lower figures of 1912 do represent a decreased prevalence of the disease, and that there can be no doubt in the mind of anyone familiar with the tuberculosis situation in New York, that the disease is year by year steadily becoming less prevalent, and less fatal,

and that the anti-tuberculosis campaign has played a large part in bringing about this encouraging result.

New York in secured a diminution of one-fourth or more, in the morbidity and mortality of tuberculosis, is employing about 165 tuberculosis nurses. Following this lead, other eastern cities, notably Boston, Baltimore, Cleveland and Buffalo, have materially increased their tuberculosis nursing forces. Buffalo is now employing seventeen nurses (sixteen nurses and a superintendent of nurses), and the conditions in Los Angeles would seem to indicate that we need at least this large a force. We have only one tuberculosis nurse.

In the work of our tuberculosis nurse there were 246 visits to old patients in 1912 and 306 this year. In fact, her work has shown practically no increase during the past year. This is due to the fact that she has from the beginning been working to her full capacity.

At present about three-fourths of the cases that terminate fatally have not been reported, so that our Health Department has not known of their existence until the presentation of the death certificate. Many of these cases have not had a physician. At any rate many of them have not been instructed and have infected others. Often such cases have lived for a number of months, possibly ignorant of their real condition, often believing they have only a "cold," thus for a long time they have been perambulating carriers of the infection, a danger to their families and to the community.

CITY OF NEW YORK,
DEPARTMENT OF HEALTH
December 18, 1913.

Dr. George E. Malsbary,
501 Auditorium Building,
Los Angeles, Cal.

My dear Doctor:

In reply to your telegram, I would say that one of the most important features of the administrative control

of tuberculosis consists in the continued supervision of the cases by nurses. In this city we thus supervise all such cases under the care of private physicians and these we keep track of by writing to the physicians several times a year asking whether the patient is still under his care and, if not, whether he has any objection to our attempting to trace the whereabouts of the patients.

The ends sought to be accomplished by having a nurse visit the patients in their homes are several. In the first place, accurate information is required concerning the home conditions, that is the number of rooms, sanitary condition, income of the family, etc.

In the second place, we attempt in this way to secure knowledge of other cases. The nurse makes careful inquiries concerning the other members of the family and urges that all of the members of the family visit the tuberculosis clinic of his district in order to ascertain whether or not they are infected. In this way early cases are often brought to light and these, of course, are then offered sanatorium care.

Still another end in view is to trace, if possible, the source of the infection and to discover whether the patient originally reported is a primary or secondary case.

The work of our tuberculosis nurses has been so eminently successful that we do not see how any effective tuberculosis work can be carried on without them.

I am enclosing herewith a number of pamphlets which deal with the questions you have raised. I call your attention particularly to Reprint No. 8, which discusses the nurse question quite fully. If there is any further information we can give you, we shall be glad to do so.

Very sincerely yours,
(Signed) HERMANN M. BIGGS,
(Enclosure.) General Medical Officer.

(COPY)

HEALTH DEPARTMENT

100 Sumner Street

Boston, Dec. 19, 1913.

Dr. Geo. E. Malsbary,

Society for Prevention of Tuberculosis,

Los Angeles, Cal.

Dear Sir:

In reply to your telegram of December 18th, I would say that tuberculosis has been declared a disease dangerous to the public health and all cases are obliged to be reported by the attending physician. This law has been in existence since 1907 in this city. It has been necessary to summon physicians into court for neglect to report cases of tuberculosis that they have attended, and as a result we are now having prompt report of all cases.

All death certificates that go from this office are investigated, and if the physician certifies that he was in attendance upon the patient and signs the death certificate "tuberculosis" and the case is not found in our records, he is summoned for failure to comply with the law.

All cases of tuberculosis reported are visited by nurses—twenty-five in number—paid by the city, and reports are made to this department as to whether or not they are receiving adequate treatment at home and living under good sanitary conditions. Cases that cannot comply with our regulations are sent to the hospital, forcibly if necessary, and detained there until discharged by this department.

Boston at the present time has a capacity of about five hundred beds for the care of these advanced cases. Incipient cases are sent to the different state sanatoria—Rutland, Lakeville, Westfield and North Reading. Within a few weeks a hospital with a capacity of sixty beds will be opened in Mattapan, in this city, for children under fifteen years of age suffering with active tuberculosis.

I might say that as a result of increased hospital facilities and visiting nurses, that conditions existing a few years ago have been eliminated in this city. It is rare now to find a neglected or abandoned case of tuberculosis. All cases under the present system are under adequate and close supervision.

The following table is copied from our annual report of 1912:

	Cases	Deaths	Case Rate
1907.....	2543	1138	45.75
1908.....	2637	1094	41.49
1909.....	2900	1072	36.97
1910.....	3479	1163	33.43
1911.....	3137	1167	34.01
1912.....	3322	1093	32.90

The increased number of deaths in 1910 was due to the opening of the hospital at Mattapan and cases that had formerly been treated at state institutions were brought to this city.

I am enclosing under separate cover the circulars and cards used in this work.

Very truly yours,

(Signed) FRANCIS X. MAHONEY,

Chairman.

FROM THE REPORT OF THE DEPARTMENT OF HEALTH OF THE CITY OF NEW YORK, ON THE TUBERCULOSIS CAMPAIGN.

Home Visitation.—Among the new methods created by the anti-tuberculosis work, none has been productive of more good than home visitation, for only in this way has the real problem been brought to light. As we look back we realize how helpless we were without this simple but very powerful means of attacking disease. Home visitation aims to bring to light other cases of the disease in the same family; it strives, if possible, to trace the cause or source of the infection; it seeks to learn what influence the patient's environment has on his disease and on the health of others in the home; it attempts to devise means of curing the infections which have already occurred

and of preventing further infections. It tries, by an intensive study of many cases, to gather experience to guide in the care of all. In short, home visitation constituted the absolutely necessary and only means of learning the conditions surrounding and the causes of the infection. In this connection we may quote from an editorial in a recent number of the *New York Medical Journal*:

"... Home visitation undoubtedly supplies the surest way to reach the indifferent and ignorant portion of the public, and every one familiar with public health administration knows that this constitutes the great obstacle in the successful prevention of disease. These people cannot be reached through public lectures or through printed circulars of information, or yet through exhibitions; such methods are all far too indirect, too impersonal. But visit the people in their homes, show them that your interest is personal, help them with their individual problems, teach them the wherefore—and the solution of many a difficult health problem lies close at hand. This has been well shown by the success attending the work carried on against tuberculosis and by the splendid results obtained in New York in recent years through the campaign against infant mortality. . . . It is evident, from what has been said, that the only effective means of reaching a very large part of the population will be closed to the public health administrator if home visitation is interfered with, and it is equally clear that there can be no home visitation without notification to and registration of the cases by the health authorities."

Generally speaking, prior to the introduction of routine home visitations in anti-tuberculosis work, the only occasions when such visits were made by health authorities were for the isolation of cases of the so-called contagious diseases, and when a special

study was being made of the epidemic occurrence of some one of the infectious diseases such as typhoid fever, diphtheria, etc. Gradually public health administrations are beginning to realize that home visitation is a method not merely applicable to, but almost indispensable in many public health problems, and that in order to make further progress it is essential to introduce this as one of the routine methods of public health work. And just as tuberculosis has been found to be, in the final analysis, not a mere bacterial invasion but a symptom of social pathology, so it is gradually being realized that many other diseases afflicting mankind have a social pathology. Instead of considering only the immediate environment of each individual case, attention is now being paid to hygienic, social and economic conditions generally, thus giving the health administrator a larger and less distorted view of his problem.

(COPY)

CITY OF BALTIMORE, MARYLAND

Health Department

Baltimore, Dec. 18, 1913.

Dr. George E. Malsbary,

Secretary, Society for the Study and
Prevention of Tuberculosis,

501 Auditorium Building,

Los Angeles, Cal.

Dear Sir:

... We have sixteen field nurses and three tuberculosis dispensaries, and our work shows the need for many more.

Sincerely hoping that you will be able to obtain the assistance from your council that you desire, I remain,

Yours respectfully,

(Signed) NATHAN R. GORTER,

Commissioner of Health.

In Baltimore, of 1892 new cases reported in 1912, only 382 were reported by physicians, which indicates the inadvisability of depending upon physicians for these reports. During that year 4743 patients passed through the

hands of the Nurses' Division of the Health Department, to whom the sixteen nurses paid 72,058 visits, an average of fifteen visits to each patient during the year. Out of the 3107 patients on hand at the end of the year we find that 629 of them, or about 20 per cent, are receiving charitable relief. It is probable that another 20 per cent are on the verge of touching bottom likewise, and will do so within the ensuing year. For good measure, let us add another 10 per cent, making in all, as a most liberal allowance, 50 per cent of the cases who are on or below the poverty line. That leaves then 50 per cent who are above it, who have steady incomes, which if not large are at least amply sufficient to provide a comfortable amount of food, clothing, shelter and leisure. In fact, some of the patients live in most excellent homes and are far removed from the dire poverty, overcrowding and unsanitary quarters usually considered to play such a great part in the spread of tuberculosis. These people, however, are in great need of instruction from the nurse, and in these houses she is quite as welcome as in those of the poor. Out of the entire visiting list but sixty patients objected to the visits of the nurse. Sixty out of 3107 seems like a small number.

REPORT OF THE TUBERCULOSIS NURSES' DIVISION, HEALTH DEPARTMENT, BALTIMORE, MD., 1910.

"The more tangible results arising from all this teaching are now to be considered. The first consideration is **registration**. Until we know the thing we are dealing with we are working in the dark. Until we know the number of tuberculosis cases in the city we can form no conception of the danger, nor of the problem we are trying to combat. During 1909 the number of tuberculosis cases registered with the Health Department was 919. During 1910, under the nurses, 3202.

Death Rate.—The true test of the prevalence of a disease is the size of the death rate from it. For every person who dies of tuberculosis, it is estimated that there are from five to ten others who have it. This number varies according to different authorities. During 1909 the number of people in Baltimore who died of pulmonary tuberculosis was 1400. The death rate for 1910 was 1234, a decrease of 166 cases, or 11 per cent lower than the preceding year. The death rate has been slowly dropping ever since the tuberculosis campaign was begun in 1904, and this year (1910) is perhaps the last of a series of years during which the crusade has been carried on, and we are claiming for ourselves results that were put in motion by the first tuberculosis exhibition and which were carried on for six years by the Visiting Nurse Association. However, the lowered death rate is here, and it is the lowest death rate since 1903."

"This division, organized January 1, 1910, consists of a corps of fifteen special nurses whose object is to give advice, instruction and nursing service to all patients in the city who are suffering with pulmonary tuberculosis. It is the aim of this division to bring under the nurses' supervision every patient in Baltimore thus affected, in both incipient and advanced stages, found among both the poor and the well-to-do. How well we are succeeding in this may be judged by an analysis made of 3000 cases which passed through our hands this past year—of that number 1006, or over 33 per cent, were known to some relief giving agency, while the remaining two-thirds were not only able to support themselves and did not need any outside or charitable relief, but were in many instances in very comfortable circumstances. This answers the question which is often raised, that as city nurses we are necessarily confined in our work to the very poor; we

find, however, that this is not true, and as time goes by we find that we are not only sought but welcomed in the homes of those in good circumstances, who are equally in need of our services as those who are hampered by extreme poverty. This is as it should be, for the Health Department should be as freely called upon by all classes of citizens as are the Police and Fire Departments.'

"On December 31, 1912, the Tuberculosis Division completed its third year of service. The object of this division is to bring under supervision every case of pulmonary tuberculosis in the city, without regard to color, sex, or social standing. In this supervision we include early and advanced cases as well as chronic and suspicious ones—there is no clinical distinction made as to the kinds of cases that are looked after. The majority of our cases require little beyond supervision—advice, supplies, and general instruction as to the nature of the disease. The last stage or bedridden cases require nursing care, and it is upon these advanced cases, as well as those who are in contact with them, that we concentrate our chief effort. The result of this concentration is noticeable in the decreasing death rate, which is the only gauge by which we can reckon our value to the community. Hospitals for advanced cases, special dispensaries for the recognition of tuberculosis, and a staff of visiting nurses for home instruction constitute the three main factors which go to reduce the death rate, and the Tuberculosis Division of visiting nurses is contributing its full share towards this accomplishment.

"The city is divided into sixteen districts, two more than we had last year, since two more nurses have been added. These sixteen field nurses, together with a superintendent of nurses, constitute the staff. Each nurse is responsible for her own district and is

expected to care for all cases of tuberculosis that may be reported to her."

The control of the tuberculosis situation in Los Angeles is largely a matter of training those who are here and who come here so that they will not infect others. Such instruction and the proper care of the incipient cases will do most in the lessening of the prevalence of this disease among us. The work among the chronic cases must include training them so that they will not be dangerous centers of infection. A careless consumptive is a menace to the community. Every infected family is a center of infection, dangerous to the community in proportion to the carelessness and indifference of its infected members. If we can prevent the further infection of new material, many of the cases now existing will die, but the progress of the disease will be retarded among us.

We must have an increased fighting force of physicians, and especially of nurses. We must rely largely upon the tuberculosis nurses to effect the education of the tuberculosis patients along sanitary and hygienic lines, so that these cases will not be absolutely dangerous to the healthy members of our community with whom they come in contact. To do this work satisfactorily in Los Angeles at the present time will require a total of seventeen nurses (a head nurse, one assistant and fifteen nurses). The head nurse is necessarily to avoid confusion, and the assistant to the head nurse will be required to look after the cases at the County Hospital in follow-up work and to attend the Clinic.

Acting upon the suggestion of our Health Commissioner, your committee has sought the attitude of the merchants of Los Angeles, especially our large taxpayers, regarding our proposition to create an adequate corps of tuberculosis nurses. The following let-

ter was sent to a number of representative firms:

"December 20, 1913.

"Gentlemen:

"The Nursing Commission of Los Angeles has appointed the undersigned a committee to bring in proper form arguments to be presented to council, showing the advisability of increasing our tuberculosis nursing force. New York, with 165 tuberculosis nurses, has reduced the tuberculosis cases and deaths more than one-fourth. Following this lead, a number of eastern cities, notably Buffalo, Cleveland, Boston and Baltimore, have markedly increased their number of tuberculosis nurses. After studying the local condition in Los Angeles it would seem that we ought to have about the same number as Buffalo, seventeen (a head nurse and sixteen nurses). At present Los Angeles has only one tuberculosis nurse.

"Will you kindly sign and return the enclosed form, to be presented to council, showing that you recognize the importance of trying to reduce the morbidity and mortality of tuberculosis, and that you are in favor of such legislation being enacted without undue publicity. There is no reason that Los Angeles should not be as civilized as Buffalo.

"The chief duty of the tuberculosis nurse is in the education of tuberculosis patients in hygiene and sanitation, helping them to make their homes and surroundings conducive to their recovery and safe for the other members of the family, and teaching the consumptives to so care for themselves that they will not be a menace to those with whom they come in contact. This is a most important part in the reduction of the number of new cases.

"Hoping you will help us secure these results with as little fuss and feather as possible, I am,

"Sincerely yours,

"GEO. E. MALSARY."

To the Council of the City of Los Angeles:

Gentlemen: The undersigned would respectfully request your honorable body to listen to the argument of the committee from the Nursing Commission, urging that the number of tuberculosis nurses in Los Angeles be increased. We believe council should materially encourage the efforts to reduce the morbidity and mortality of tuberculosis, and that this should be done without undue publicity.

Respectfully yours,

Date.....

Practically all we have approached have responded by signing the form, so that we have represented by these signatures a large proportion of the tax-paying merchants of Los Angeles.

THE LOCAL SITUATION

The map in the office of our Health Department, indicating the location of the cases of tuberculosis reported, shows the wide general distribution of tuberculosis in the city of Los Angeles, notwithstanding the ridiculously idiotic legislative attempts to prevent these patients receiving hospital treatment within the city limits.

During the calendar year 1913 there were reported in Los Angeles 1971 cases of tuberculosis. Our tuberculosis nurse has kept an average of 200 tuberculosis patients on her list, many of whom she has been able to see only once, since she is only able to make an average of a little over 100 visits on tuberculosis cases per month. The total number of visits she made in 1913 was 1600, but many of these were not made upon tuberculosis patients.

The eastern cities average fifteen calls per patient. New York has about ten times as many reported cases of tuberculosis as Los Angeles and employs 165 nurses. From a practical standpoint it would seem well to enact

an ordinance providing for a number of tuberculosis nurses in proportion to the number of reported cases of tuberculosis in the city. During the past year there were 1971 cases reported and if these were to receive an average of fifteen calls during the year it would mean a total of 29,565, or a little over 2463 calls per month. This would require eighteen nurses, working as hard as our nurse worked during the past year, when she made a total of 1600 calls all told. Since we already have one tuberculosis nurse, this would mean the appointment of seventeen additional nurses.

A better method of arriving at the minimum number of nurses required to accomplish effective work would be to provide for the employment by the Health Commissioner of a head nurse and a sufficient number of visiting tuberculosis nurses, the total visiting tuberculosis nurses not to exceed the proportion of one nurse to 100 reported cases of tuberculosis.

Council having turned a deaf ear to appeals for help, though supported by a wagonload of petitions such as we have described, the following initiative petition has been launched:

To the Honorable, the City Council of the City of Los Angeles, County of Los Angeles, State of California:

Whereas, New York City, with one hundred and sixty-five municipal tuberculosis nurses, has recorded a diminution in the number of cases of tuberculosis from 32,065 in 1910 to 22,752 in 1912; and a reduction in the death rate from pulmonary tuberculosis in Manhattan and the Bronx from 427 per hundred thousand in 1881 to 190 per hundred thousand of population in 1912, a reduction of 55 per cent; and,

Whereas, the results obtained in New York City are ascribed largely to the employment of municipal tuberculosis nurses, in a communication from the general medical office of the city of New York, Herman M. Biggs, dated December 18, 1913; and,

Whereas, in the city of Boston, Massachusetts, "All cases of tuberculosis reported are visited by nurses—twenty-five in number—paid by the city, and it is rare there now to find a neglected or abandoned case, and there has been a diminution in the total number of deaths from tuberculosis and also in the case rate"; and,

Whereas, the city of Baltimore, Maryland, with a force of seventeen tuberculosis nurses has secured a reduction in both the cases and deaths from tuberculosis, so that the Commissioner of Health of that city declares that their work shows the need of many more tuberculosis nurses; and,

Whereas, the city of Buffalo, New York, with a force of seventeen tuberculosis nurses, feels the need of more tuberculosis nurses; and,

Whereas, the city of Cleveland, Ohio, with fifteen tuberculosis nurses and a record of good results, declares the need of more tuberculosis nurses; and,

Whereas, the city of Columbus, Ohio, has six tuberculosis nurses; and,

Whereas, the city of Los Angeles, California, has only one tuberculosis nurse and has shown an increase of about 50 per cent in the reported cases of tuberculosis during the past year, and a large increase in the number of deaths from that disease; and,

Whereas, the work in the eastern cities, above referred to, has shown that a visiting tuberculosis nurse cannot satisfactorily take care of more than one hundred cases of tuberculosis; and,

Whereas, a recommendation similar to the following proposed ordinance, received the unanimous endorsement of the Nursing Commission of the city of Los Angeles, January 6, 1914, and has been endorsed by many of the leading business men, firms and organizations paying taxes in the city of Los Angeles; therefore,

The following ordinance is hereby proposed, to be adopted by the city council of the city of Los Angeles, or,

if the same be not adopted by said council, the proposed ordinance then to be submitted to a vote of the electors of the city of Los Angeles as provided in the Sections 198-a, 198-b, 198-c, 198-d, and 198-e of the Charter of the city of Los Angeles governing the initiative, to wit:

An Ordinance Providing for the Employment of Municipal Visiting Tuberculosis Nurses

Section 1. The Health Commissioner of the city of Los Angeles shall and is hereby empowered and directed to employ, in the name of and for the city of Los Angeles, municipal visiting tuberculosis nurses, in the proportion of one such nurse per one hundred reported cases of tuberculosis in the city of Los Angeles.

Sec. 2. The municipal visiting tuberculosis nurses thus employed by the Health Commissioner of the city of Los Angeles shall be paid by the city of Los Angeles at the rate of compensation provided for municipal nurses in Section 1 of Ordinance No. 28,179 (New Series).

Sec. 3. It shall be the duty of the municipal visiting tuberculosis nurses of the city of Los Angeles to visit professionally all reported cases of tuberculosis in the city of Los Angeles, excluding those under treatment in public or private hospitals or sanatoria, unless requested in writing not to do so by the patient or physician in charge.

Sec. 4. The Health Commissioner of the city of Los Angeles is hereby empowered to establish such supply stations as he may deem necessary from time to time for the professional use

of the tuberculosis nurses provided for in this ordinance.

Sec. 5. The Purchasing Agent of the city of Los Angeles is hereby directed to purchase on requisition from the Health Commission such supplies as the latter may from time to time deem necessary for the professional use of the tuberculosis nurses provided for in this ordinance.

Sec. 6. The Health Commissioner shall divide the city of Los Angeles into appropriate sections or districts and shall assign one or more tuberculosis nurses to each and every section or district thus formed according to the number of cases of tuberculosis therein, exclusive of those under treatment in public or private hospitals or sanatoria.

The tuberculosis nurses shall be held responsible for their respective sections, but may at the discretion of the Health Commissioner be given work outside of the sections to which they are assigned.

We bespeak for this petition your support as a signer, voter and worker. The initiative could not be invoked for a better purpose.

It will appeal to the business man because of its economic value; and Los Angeles cannot afford the reputation of being a hotbed of tuberculosis.

It will appeal to nurses because it is in line with the ideals of their profession.

It will appeal to physicians, professional men and humanitarians because it is of the highest order of preventive medicine, teaching people how to live so as to retain or regain their health and prevent the spread of disease.

500 Auditorium Building.

THE PRESENT STATUS OF RADIUM THERAPY IN CANCER

BY A. C. COWPERTHWAIT, M.D.

When we contemplate the lamentable fact that cancer is on the increase in all parts of the world and remember that only in the earliest stage, when

it is yet a local disease, is it amenable to any form of treatment now known to science, our responsibility for early diagnosis appears tremendous.

If the medical profession is to merit and retain the confidence of the public as the custodians of its life and health, we must diligently exert ourselves to use every means at our disposal to discover the cases of malignant growths. We must spur ourselves on to more painstaking and thorough examination of every patient who applies for our services. The highest possible development of the power of observation must be brought to bear upon every case if we are to gain the precious opportunity to bring to our patients that genuine relief which they confidently expect from and have the right to demand of the regular doctor.

While great advances have been made in our knowledge of the properties and therapeutic uses of radium within the past two or three years, yet we are only just beginning to obtain a practical understanding of its virtues as well as of its limitations, especially in reference to its use in the treatment of carcinoma. It is only a short while ago that radium was lauded as a cure-all for all malignant growths, but it is only fair to acknowledge that such laudation did not come from the scientific men who were then and are now striving by all possible methods to arrive at definite scientific conclusions as to its merits.

The world stood appalled at the ravages of this constantly increasing scourge and it was only natural that the press and the public should only too willingly grasp at a remedy that gave promise of being an almost certain cure. The same has been true in the history of tuberculosis for a long period of time and even various cancer treatments have been honestly exploited in the belief that a cure had been found, in each case, however, only disappointment has resulted. The press, only too eager to give publicity to a new and promising scientific discovery in medicine, giving to the world greatly exaggerated statements as to the thera-

peutic virtues of radium, are equally as ready to go to the other extreme in proclaiming its failures, and thus creating in the public mind a distrust that would not have existed had not the remedy been over-capitalized at the start.

For this reason just at the present time there prevails an unjust reaction in the public mind as regards the curative powers of radium, and even some physicians and surgeons going so far as to pronounce it as a useless and dangerous remedy. It is, perhaps, unnecessary to say that such statements and opinions only emanate from those who have at best but a superficial knowledge of the subject and who are not in any sense competent to judge of its merits. Some of these also, probably many of them, are animated in their criticisms of radium by selfish motives.

One of the most distinguished surgeons of this continent, in a recent address before the American Society for the control of cancer, amongst other things, said, "there is absolutely no cure for cancer except to cut it out." This voices the prevailing sentiment among surgeons, and yet when we see that practically all cancers removed by surgical measures ultimately return, and usually very quickly and with increased malignancy, we can hardly see the logic of the celebrated surgeon's statement. That up to a recent date surgery was the best treatment for cancer may be admitted, although it is claimed that some forms of paste or caustic treatments show 60 per cent of recoveries, and also notwithstanding the fact that many cases of suspected cancerous growths, especially in the breast, and which at the time of operation were and perhaps had been for years in a quiescent state, after operation returned with startling rapidity and with invariably fatal results. Admitting that surgery is the best treatment for all forms of cancer, excepting epithelioma, but at the same time bearing in mind

the frightful proportion of fatal recurrences, it would seem that the surgeon would gladly welcome any agency that by pre- or post operative action promised to prevent such recurrences and thus make the surgeon's work an unqualified success.

This radium will do in a large majority of cases, and it is to be regretted that up to the present so few surgeons seem inclined to take advantage of this most valuable surgical adjunct.

The surgeon referred to also stated that "radium does not permanently cure internal cancers. It may check the growth for awhile, but sooner or later it comes back." Even if this were true, what more can be said for surgery? Then again radium has the advantage in that if there are signs of recurrence it can be used over and over again, checking the advance of the growth almost indefinitely and that without the pain, disfigurement and dangers attending repeated surgical removals. Also we should not forget that during the interval between the primary operation and the subsequent operations the cancer extends to adjacent tissues to such an extent or involves vital organs so that further surgical measures are impracticable. How much better then to follow the primary operation with radium treatment and thus minimize the probabilities of recurrence.

The surgeon also stated that "the failures (with radium) outnumber the cures 100 to 1." This is a reckless statement unworthy of a scientific man, and, what is more, it is absolutely untrue, and so grossly absurd as well as untrue, that it does not merit considerations, and discredits any other statements coming from the same source.

So far as we know radium has no appreciably favorable results in generalized cancer—that is where the cancer cells have escaped into the bloodstream and are carried to various parts of the body producing metastasis.

Where local developments occur on or near the surface radium will destroy the individual growth, but will have no influence whatever in checking the general advance of the disease. In this class of cases very exhaustive clinical researches are being conducted by using intravenous injections of very minute solutions of radium salts. These researches have already given such manifestly favorable results that we may be justified in hoping that the day is not far distant when we shall be able in this manner to follow and destroy the cancer cells after they have entered the circulation.

When it was found that radium possessed the power to destroy cancer cells it was used indiscriminately both as to cases and as to dosage. The result was that it sometimes did more harm than good. It cannot be said that even now we are able to establish the proper dosage in all cases, yet I think we are getting nearer to the point, even though there is still a great difference of opinion on the subject.

Kelly favors heavy dosage in all cases. He cures an epithelioma with one application of 100 M. G. Others think it better and safer to use a smaller quantity repeatedly applied. This may possibly be for the reason that the latter have not so large an amount in their possession. Such has been my misfortune until quite recently, yet I could not have asked better results than I have been able to obtain with a few applications of a tube containing only 12 M. G. of pure radium bromide.

It is now an established fact that radium will cure epithelioma, and in so doing it has the advantage over surgery in that it leaves no scar or deformity. This means a great deal, especially in cases involving for instance the removal of the nose, or eye, or entire lip or jaw.

Epithelioma occurring on the skin are most easily cured. Those upon mucous membranes are more obstinate, as in

the mouth, throat, vagina or rectum; of these cancer of the tongue is probably the most intractable. However, in all these a more prolonged treatment will result in a cure, unless the case is too far advanced. The history of such cases is that after being thoroughly destroyed by radium they do not return, whereas the contrary is true in almost all such cases after surgical removal.

The Gamma rays are the active force in radium. The Alpha and Beta rays must be screened off to prevent their destructive effect upon healthy tissues. The Gamma rays will destroy every cancer cell with which they come in contact. In small growths at an early stage, especially when in a locality easily reached this may be readily accomplished, but in deeper seated growths, as in the abdominal cavity, and which are usually quite advanced before their discovery, it is quite another matter. The Gamma rays penetrate from three to four inches unless too heavily screened, but even that penetration may not be sufficient, and moreover it is impossible to ascertain the circumferential extent of the disease, or rather of the rapidly multiplying cells, as they make their inroads upon adjacent tissues. Thus radium has its limitations just the same as surgery. If the surgeon could only follow the cancer cells in their migrations and make a clean sweep of them, there would ordinarily be no recurrences, but this he cannot do, so recurrences are the rule and not the exception. Many such cases have been treated by imbedding one or more tubes of radium within the diseased area, but not with any flattering success. I consider that it would be much better to remove the cancerous tissues as far as possible with the knife, afterwards implanting a tube of radium, well screened, into the wound. I have obtained the best results in such cases by applying a radioactive therapeutic film over the abdomen after the opera-

tion. This not only tends to destroy any remaining diseased cells, but forms a constructive action of restored metabolism and invariably, according to my experience, relieves pain, and if it does not destroy all remaining cells, makes the patient comfortable and greatly prolongs life.

In cancers of the breast it is much better to remove the dead tissue by surgical measures than to attempt its destruction by radium. Then, by applying radium after the operation, the cells that may have escaped the knife can be destroyed and recurrence prevented. Here again the radioactive therapeutic film is of great usefulness. I have never know or heard of a case of cancer of the breast returning after treatment in this manner.

One of the happiest results of radium-therapy has been in the treatment of internal cancer. Very many cases have apparently been radically cured, at least they have shown no signs of recurrence after a period varying from two to eight years. Dr. Abbe and Dr. Kelley have reported such cases, as have also many French, German and Italian physicians.

In these cases pure radium salts is the best treatment, but even here cures are reported where the diagnosis was unquestionably correct, by the use of the radioactive film, applying it over the abdomen and an aluminum capsule at the osuteri, thus obtaining the "cross-fire," as it is termed.

In internal cancer after removal when another operation would evidently be out of the question, and even after a secondary growth is manifest, radium will prevent recurrence, and in the latter case, will destroy the developing growth in its incipency and produce a cure.

The application of pure radium bromide in sufficient amount and properly used, is harmless, painless and efficient remedy in all cases of epithelioma of anything like recent origin, and in

older cases, where metastasis have not occurred, or where the destruction of tissue is not so extensive as to make radium treatment obviously impracticable, as is frequently the case in the more malignant types, I have found the latter class of cases to have almost invariably followed the application of caustics, and they are the most unamenable to treatment. Radium is most successful when it is the first treatment employed. In those cases which have been operated, or have received X-rays, or any other form of treatment, radium is slower in its action. This, however, does not refer to those cases that receive radium applications immediately after operation to prevent recurrence.

Radium is of great value and almost universally successful in other forms of skin diseases. In lupus, rodent ulcer, warts, keloids, etc., presenting a small area of localized patches, it is particularly useful. I have found the radium ointment most successful in eczema, psoriasis and other ordinary skin diseases. Almost any ulcer, even syphilitic, will rapidly heal under radium treatment. Where standardized radioactive products can be used they have the advantage of not being prohibitive in price, are easily obtained, and are readily applied, no technical knowledge being required.

Radium has proved highly satisfactory in removing secondary nodules occurring in the scar after operation, as we so often see in breast cases. In cases that are radioized with pure radium immediately after operation, or in those who at once have applied and wear a radioactive film after operation, these nodules as a rule do not occur.

Except in the treatment of epitheliomas occurring on the surface of the body radium is not a substitute for surgery, but is rather a valuable auxiliary and should be invariably employed

after every operation for cancer, wherever the disease may have been located, in order to practically insure non-recurrence. In cases where the prognosis is hopeless either pure radium or a radioactive film should be applied to relieve pain and prolong life.

Osteo-sarcoma yields promptly in most cases, but in lymphosarcoma some of the best results are being obtained. In the latter, where practicable, the affected gland should be thoroughly radioized several times, then removed surgically and the wound radioized. After such treatment there seems little or no danger of recurrence.

Cancer of the larynx and other growths within the larynx offer a very promising field for radium, and some magnificent results have already been obtained. When the disease does not involve the vocal chords it is possible to destroy it without sacrificing the voice.

To recapitulate:

(1) Radium is finding its proper sphere of usefulness just as the X-rays have already done, and like the latter it is coming to have a recognized place of great value in therapeutics.

(2) Radium is absolutely curative in recent skin epitheliomas.

(3) It is better than other methods of treatment in advanced cases of skin epithelioma, and also in these growths when occurring on mucus surfaces.

(4) Radium is of no value in metastasis, where the cells have escaped into the blood-stream and set up new foci far away from the original focus, thus causing a more or less wide dissemination of the disease.

(5) Radium is a valuable adjunct to surgery in pre-radioizing and post-radioizing, thus greatly eliminating the possibilities of recurrence, and rendering it possible for the surgeon to successfully attack formidable cancerous growths that otherwise would be pronounced inoperable.

(6) Highly radioactive preparations, standardized as to strength, in the form of films and ointments, have a marvel-

lous effect in checking cancerous growths and relieving pain and prolonging life in inoperable cases.

THE EARLY DIAGNOSIS OF CANCER*

BY J. K. SWINDT, POMONA, CAL.

With the specific cause of cancer still unknown, the early diagnosis of the disease is necessarily involved in many difficulties. To those splendid laboratories endowed by American wealth and devoted to the discovery of the cause and cure of cancer, we are looking in the daily expectancy that some of them will give us the long desired knowledge of this disease, just as they have done in many others.

Already several serological reactions have been advanced as diagnostic of carcinoma, chief of which is Abderhalden's proteolytic ferment test, which is analogous to his test for pregnancy. The success of the Abderhalden reaction in the hands of many pathologists has been so encouraging during the last two years that we may reasonably expect to possess a positive diagnosis of cancer from the blood serum in a very short time.

Until we have some means of diagnosing a general cancerous condition, such as the Widal reaction in typhoid, the Wasserman test in syphilis, or the tuberculin reaction in tuberculosis, we must rely upon our alertness in interpreting the ordinary clinical symptoms of this protean disease for an early diagnosis.

So far the one great triumph of modern investigation of cancer is the proof that all cancers are at one time local, and that in this period they are curable.

The existence of a pre-cancerous condition is generally recognized and commonly consists of some form of chronic irritation.

"The chronic irritation factor," says W. T. Mayo, "is evidenced in many ways. For example, the lip cancer of the smoker and its preponderance in the male; the betel-nut chewer of both sexes and cancer of the mouth; gall stones in the production of cancer of the gall-bladder; ulcer of the stomach and its relation to gastric cancer; the 'chimney-sweep' cancer, and many others too numerous to mention. All of this leading up to the most important point in prophylaxis—the avoidance of the sources of chronic irritation and the relief of such conditions when present, as they can be truly said to be a pre-cancerous condition awaiting only the unknown factor to set loose normal limitations upon cell reproduction."

It is evident that the breadth of my subject precludes a general discussion, and I have chosen to cover it in the shape of a review of the early symptoms presenting in:

- (1) Superficial cancer;
- (2) Cancer of the breast;
- (3) Cancer of the uterus; and
- (4) Cancer of the stomach.

I have very little to offer from a personal experience, and so shall quote liberally from the foremost authorities at my disposal and try to reduce to concise and helpful proportions a great mass of current literature, and textbook material.

In regard to the early diagnosis and treatment of superficial cancer, that is skin cancer, Bloodgood has recently written numerous articles urging a crusade against all sorts of cutaneous abnormalities. Moles, warts, sebaceous and dermoid cysts, leucoplakia, nevi

*Read before the Southern California Medical Society.

and congenital defects of all kinds are to be considered pre-cancerous conditions because they are all the result of or subject to chronic irritation.

Dentists possess a rare opportunity for the observation of lesions about the lips, tongue, gums and throat and should be awake to the responsibility they incur for overlooking pre-cancerous conditions or early malignant disease in these regions.

E. H. Beckman of the Mayo Clinic, in a recent article says:

"Carcinomata on the lips, in the mouth or in the pharynx are most favorable for early diagnosis because they are situated upon the surface, where they can be seen; they can be palpated nearly always, and a section for microscopic examination can be obtained with no risk to the patient. In addition, the patient is conscious of their presence in the early stages of the disease on account of symptoms or the presence of a tumor."

Systematic examinations of the scalp, face and mouth, and insistence upon complete removal of the clothing of every patient will reveal many an unsuspected wart or pigmented mole, cyst or epithelial scale which may be on the verge of carcinomatous degeneration. Such a lesion presenting on a patient of any age may be mycotic, tuberculous, luetic, or cancerous, and most likely the latter. It is dangerous to treat these conditions with ointments, pastes and caustics, or even with the Roentgen ray before a bacteriological or microscopic diagnosis is made. Prompt and free excision of the lesion offers the best means for such a diagnosis and the only hope for a radical cure of malignancy.

Next to cancer of the skin, cancer of the breast is most easily diagnosed and cured. Over 80 per cent of all tumors appearing in a woman's breast, regardless of age, are cancers, and this fact is already well understood by the laity. Pain, hardness, rapid increase in

size, adhesions to adjacent tissues, retraction of the nipple, etc., are late symptoms, which must not be awaited for by the alert physician. Traumatism is usually associated with tumors of the breast, because the injury brings about a close examination of the parts and thereby it figures in the discovery rather than the origin of the growth. This should lead us to make more frequent examinations of the breasts as a routine measure whether there be subjective breast symptoms present or not. Every day we just miss the discovery of a lump in some woman's breast because we do not take a few seconds to examine the nipple or mamma during a "careful examination of the heart."

Having found a tumor before it has begun to produce symptoms the physician's plain duty is to demand its immediate removal for microscopical examination. In the light of our present knowledge his obligation is not to prove that the lump is cancer; the presence of a lump is preponderating evidence that it is cancer, and it is up to the physician to prove that it is not malignant or assume the consequences. Eight out of every ten cases so treated will be afforded the only opportunity for radical cure of cancer, and the remaining two will be cured in the process of the diagnosis.

More than one-half of all the cancers of the body develop in the uterus. The situation and functions of this organ seem to render it especially liable to malignant disease. Its relation to surrounding structures in the pelvis and the complexity of its lymphatic system unite to permit the early spread of the disease and to favor recurrence after the most radical operations. Chronic irritation of cervical scars, an important factor in the pathogenesis of uterine cancers, imposes upon the general practitioner the duty of more persevering efforts toward the prevention of lacerations and the proper repair of

them whenever they occur. Thus it follows that early diagnosis of cancer of the uterus is at once more necessary and more difficult than in superficial cancer.

Here again the hopes of early diagnosis are staked upon conscientious insistence upon local examinations. Many cancers of the cervix could be seen in time for absolute cure if physicians would demand and make more frequent examinations through the speculum in all women over thirty years of age.

"The first symptom, in practically all cases of carcinoma of the cervix, is a slight leucorrhoeal discharge, with an occasional spot of blood. This slight streak of blood is seen usually after exertion (extra work, long walk, lifting) or after a douche or after coitus. It is especially liable to appear within twenty-four hours after coitus. A history of such 'spotting' of the discharge or of the clothing, calls for a most careful examination, that the presence or absence of carcinoma of the vaginal surface of the cervix or the interior of the cervix, may be certainly determined.

"In cancer of the cervix in the first stage, the cervix is slightly enlarged, or one of the lips appears nodular, puffy, and has a slightly glazed appearance, with one or more enlarged vessels coursing over it, and perhaps a few teat-like processes projecting from its surface. The examining finger usually brings away a little blood, which is most significant." (Crossen)

The diagnosis is easily confirmed by microscopical examinations of a small mass of such tissue which may be removed without discomfort under local anesthesia.

In cancer of the fundus the only means of accurate diagnosis in the early stages is the microscopical examination of the scrapings from the mucosa obtained by curettement. It is well to remember that an ulceration of the cervix at middle age is practically

always cancerous, bearing in mind that an "erosion" is not an ulceration. If there is no evidence of cancer of the cervix, and no definite cause for the symptoms can be found, **the uterus should be curetted and the scrapings examined with the microscope.**

The symptom of uterine cancer which is usually the first to come to the notice of the patient is vaginal discharge. This may be a beginning discharge from a previously clean vagina, or it may be some change in an existing discharge; it may be bloody, watery, catarrhal or purulent; the essential thing is **the discharge** and what it means.

Howard Kelly in his Medical Gynecology has one of the best expositions of this great question to be found anywhere. I quote him at length, as follows:

"A most potent cause of failure in the treatment of uterine cancer is neglect on the part of the patient to apply for advice until the disease is so far advanced that an operation offers no hope. It becomes a matter of vital importance then that the public should be well informed as to the symptoms which ought to excite suspicion, and which proclaim the necessity for immediate competent medical investigation.

"There can be no doubt that the most important agent in the instruction of the public is the general practitioner. Almost all women, and married women especially, have a more or less intimate acquaintance with some physician with whom they converse at one time or another on the subject of their own health or that of their relatives, and in whose opinion they place great confidence. If every family physician would make it a point to take advantage of the opportunities afforded him by such relations, to point out the significance of hemorrhage, vaginal discharge and pelvic pain occurring about the time of the menopause, he would accomplish more towards diminishing the death rate of cancer than can be

done by any other means we can command at present."

When we come to the question of early diagnosis of cancer of the stomach we come to a difficult problem indeed.

"There is no factor which of late years has attracted so much attention as a predisposing cause of gastric cancer as has long continued indigestion. A more intimate knowledge of these cases will probably show that much of the digestive disturbance is due to the presence of an ulcer or its sequels (cicatrices, stenosis of the pylorus, etc.) 'Chronic gastric irritation' possibly would be a better term to use to denote this predisposing factor in the aetiology of carcinoma of the stomach" (Deaver).

We must look with increasing suspicion upon the cases of indigestion as they present themselves to our notice. A large proportion of the cases appearing in our offices every day come complaining of some form of indigestion. It is time that we are learning that indigestion is a symptom and not a disease to be cured with pepsin and some fancy diet. These cases must be studied consistently and intelligently if we are to be of genuine help to them.

For every case of sub-acute or chronic indigestion occurring in a patient over thirty years of age, and in which disease of the appendix or bile passages can be eliminated, I would suggest the following procedure:

1. Secure a careful life history of the case and study the incidence and sequence of each symptom.

2. Weigh the patient twice a week.

3. Give a test meal to determine retention of food particles and another for the purpose of analysis of the gastric secretion. Repeat these several times for comparison.

4. Inflate the stomach with air to aid in the search for tumor.

5. Obtain X-ray photographs of bismuth meals to discover further evidence of tumor and obstruction.

6. Having done this, if you have the slightest suspicion of cancer, advise exploratory incision and thereby put the responsibility of delay squarely up to the patient.

J. K. SWINDT,
McGowan Block, Pomona.

TUBERCULOSIS IN THE ORIENT.

Tuberculosis is one of the most serious public health problems of the Orient. Active organizations to fight this disease have been formed in Japan, the Philippines, India, and Australia. A movement is on foot for a national organization in China and in a number of cities local work has been started. While no accurate figures are available, those who are in position to know claim that consumption takes annually from 500,000 to 1,000,000 lives in China alone. In India the death rate is fully as high, and on account of caste distinctions and native superstitions, the problem of prevention and treatment is peculiarly difficult. The Japanese government has taken a hand officially in the control of tuberculosis, and is co-operating with two well organized private associations. The death rate, while very high, is lower than in China and India. Under the direction of the United States Public Health Service a movement for the prevention of tuberculosis in the Philippines has also been organized.

The National Association for the Study and Prevention of Tuberculosis, with headquarters in New York, although organized especially for work in this country, has been largely instrumental in the establishment of anti-tuberculosis movements in most of the oriental countries, as well as in Africa and South America.

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EDITORIAL

THE NURSES' PETITION AND THE STATE TUBERCULOSIS PETITION.

It would be difficult to imagine a more legitimate call for the initiative than these two measures. They appear in full in this issue of the Practitioner. At a joint meeting of the Executive Committee of the California Association for the Study and Prevention of Tuberculosis and the Board of Directors of the Los Angeles Society for the Study and Prevention of Tuberculosis, held in Los Angeles June 8, 1914, both these petitions were endorsed and a special committee, consisting of Dr. George E. Malsbary, Mr. J. Tod Cook and Dr. George H. Kress, was appointed to take charge of the work of securing names. All practitioners of the healing art, who are interested in the highest form of preventive medicine, represented by these measures, will be expected to do their share in the furtherance of these petitions. Besides signing the petitions and having your patients and friends sign them, the

Committee asks that you help secure voluntary workers. There are many broad-minded, charitably inclined people, who will be glad to make the personal sacrifice of service for this most excellent cause. The Committee asks that you send them, with your professional card, to the Secretary of the local Society, Dr. Malsbary, 500 Auditorium building, any week day between twelve and four in the afternoon. This is your opportunity to do an unselfish act, that will result in great good to the community and state. Let us make California, and especially Los Angeles, the most healthful spot in the universe. It can be done.

SOUTHERN CALIFORNIA MEDICAL SOCIETY.

The Riverside meeting, held May 6th and 7th, fully met the best predictions made for it. The place of meeting, the Glenwood Hotel Mission Inn, proved seductively charming. The meeting was well attended, and the scientific



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES 1912-NO. 2.

"We Must Fight-TOGETHER!"



tone was strikingly prominent. The papers were of a high order. Among the distinguished visitors that addressed the Society were E. C. Rosenow of Chicago, and Prof. Egon Ranzi of the University of Vienna. Dr. Rosenow spoke on the Transmutation of Bacteria, describing his original work along this line that promises so much for the immediate future. Beginning his discourse at ten o'clock at night, he kept his audience spellbound until midnight. Professor Ranzi reported twenty cases of Extirpation of the Spleen for Anemia. One of the most striking features was the lantern slide demonstration and moving pictures of the stomach, presented by Dr. Harry G. Watson of Los Angeles, in one of the moving picture places. "Fee-Splitting" was properly scored by Dr. Andrew S. Lobinger—that is, when the fee is secretly divided. Prof. J. H. Slemons, of the University of California, was present but failed to deliver his paper on "A Rare Case of Dystocia." Dr. W. W. Richardson of Los Angeles, described his work on the "Treatment of Fractures." Dr. D. C. Strong of San Bernardino, reported the case in which he removed a large part of the intestine, following an injury to the bowel. This called forth a very interesting discussion, in which several gentlemen seemed to vie with each other in reporting enormous intestinal resections. Dr. A. B. Cecil of Los Angeles, read quite an up-to-date paper on the "Functional Renal Tests In the Diagnosis of Kidney Conditions." We will not mention more of the papers in this limited space. They were all worthy of the careful consideration they received. This was the fiftieth regular semi-annual meeting of the Society. It bids fair to have a long lease of life, judging from the meritorious work presented at this session. The next meeting will be in Los Angeles.

PHYSICAL EXAMINATION OF PROSTITUTES.

The following excellent ordinance has been proposed by George L. McKeely, the Los Angeles City Prosecutor.

Whenever, in the Police Court of the City of Los Angeles, any woman shall be convicted of the offense of vagrancy, either as a lewd or dissolute person, or as a common prostitute, or for living in or about a house of ill-fame, or of keeping or residing in a house of ill-fame, or of soliciting or offering her body for the purpose of prostitution, or of the violation of any other law ordinance of which the evidence shows that the defendant is guilty of an act or acts or prostitution, it shall be the duty of the Health Commissioner of the City of Los Angeles to examine such woman and ascertain if she is affected with or afflicted with any contagious or infectious venereal disease, and the said Health Commissioner may detain such woman in custody until such examination shall be completed, and if found to be so affected with any such disease and that the same is communicable, the Health Commissioner shall immediately remove such person so affected to some hospital or place designated by the City Council of the City, that such person shall be there held and be given treatment for such disease until the said person has fully recovered, or until such disease has reached a non-communicable stage. Provided, that the woman so convicted may be returned to the Court at the time set by the Court for the pronouncing of judgment, to be returned to the place of detention after the sentence has been imposed. Provided, that when judgment of imprisonment is imposed for the offense above mentioned by the Police Court of the City for any of the offenses herein mentioned, and the Court is notified that the defendant is afflicted in such a way as to

be amenable to quarantine under the terms of this Act, the Court shall direct that the defendant be detained in the hospital designated by the City Council, and at the expiration of such treatment if the full term of sentence has not expired, that she be transported and transmitted to the City Jail of said City, there to serve the remainder of the sentence of imprisonment imposed by the Court. Provided, that the defendant may be paroled from the hospital by the Board of Health with the consent and under the direction of the Board of Parole that is authorized by law to parole prisoners from the City Jail.

We take pleasure in giving space to this proposed ordinance, the enactment of which would tend to lessen the venereal infections. Similar laws in other cities have proven beneficial in that they have lessened the prevalence of the venereal infections among both prostitutes and the innocent. Incidentally, they extend mercy to a most unfortunate class of women.

By the way, George L. McKeeby, who proposes this ordinance, is a candidate for Judge of the Superior Court, Los Angeles County. We would bespeak for him your support at both the primary, August 15th, and the general election, November 3, 1914. It is to the highest interest of the community that such men should occupy the bench.

HOWARD B. GATES.

In the December issue of the Southern California Practitioner we noted with deep regret the serious illness of Dr. Howard B. Gates of Los Angeles, from peripheral neuritis, in the city of Rome. We must now record his untimely death (his age being 46) on May 8th in Italy's capital.

Dr. Gates was first afflicted with this disease in January of last year, but he continued with the usual enthusiasm attending to his extensive practice un-

til last August when, hoping that he would regain his health in the European Riviera, he started on the long journey. He travelled until October when he became helpless when, accompanied by his wife, Dr. Amelia Gates, he went to a well known private hospital in Rome where he was placed in the care of Drs. Mangazzini and Bastienelli, two of the leading neurologists of Europe, who gave him the most devoted attention until the day of his death. At times they felt encouraged and it was not until shortly before the end came that they entirely abandoned hope.

Dr. Gates was born in San Jose, California, where he practiced his profession for 18 years. He was for years county physician and the medical superintendent of the county hospital in San Jose which was destroyed by the earthquake at the time of the San Francisco disaster in 1906. He came to Los Angeles in 1909 and soon became one of Southern California's most prominent surgeons.

He was able, untiring and conscientious. His expression, the deep penetrating look of his eyes, carried a sense of deep sincerity which was quickly realized by those who came under his professional care. Much of his professional education was gained in Vienna.

Two brothers, Carroll W. Gates and Egbert J. Gates are leading citizens of Los Angeles and one of them went to him immediately when he was taken ill and they alternated, one or the other being with the wife constantly by his side until his death; thus everything possible for money, science and fondest affection to do was done in that far-away city.

Mr. E. J. Gates and the widow, Dr. Amelia Gates (Cooper Medical College, 1894) returned to Los Angeles on May 29th with the ashes—cremation having taken place in Rome.

Besides the relatives mentioned the

Doctor's mother, who lives in South Pasadena, is bowed down with grief and she with the other members of the family have the deep sympathy of the medical profession of California.

BRYAN VERSUS DARWIN.

W. J. Bryan is a nice man in all that term implies. He has a playful method of handling great subjects that is very entertaining to the great mass of man-and-woman kind, who know even less about these subjects than Mr. Bryan himself.

The following from *The Nation* (N. J.) gives one of Mr. Bryan's 'Chautauqua gems':

'Mr. Bryan is skeptical of the Darwinian theory, 'I am not yet convinced,' he says, 'that man is a lineal descendant of the lower animals. I do not mean to find fault with you if you want to accept the theory; all I mean to say is that, while you may trace your ancestry back to the monkey, if you find pleasure or pride in doing so, you shall not connect me with your family tree without more evidence than has yet been produced.' Mr. Bryan objects to the theory 'for several reasons':

'First, it is a dangerous theory. If a man links himself in generations with the monkey, it then becomes an important question whether he is going towards him or coming from him—and I have seen them going in both directions. I do not know of any argument that can be used to prove that man is an improved monkey that may not be used just as well to prove that the monkey is a degenerate man, and the latter theory is more plausible than the former.'

It is difficult to believe that this is the sort of thing which tens of thousands of persons have paid good money to hear."

TREATMENT OF ARTHRITIS DEFORMANS.*

Chas. W. Delaney, M.D.

Orthopedic Surgeon to the Altoona Hospital, Pennsylvania.

Arthritis deformans is a chronic non-suppurative affection of the joints, deforming and destroying their function. There are two types: (1) proliferative; (2) degenerative. Former common in young and middle life; latter in age.

Proliferative produces over-growth of tissues about joints eventually entering joint resulting in ankylosis, at which stage it reaches the limit then atrophy sets in.

(1) Joints not symmetrically swollen, skin pale, seldom inflamed, but may be at times. Pain is more or less constant and acute.

(2) Degenerative type is very commonly seen in old people.

Etiology is not definitely certain; writer believes it is metabolic with alteration of some internal secretion. Colonic stasis concomitant condition. Hidden bacterial infection some believe is cause, but removal of same never relieves pains.

Cases reported in children 5 and 10 years cured by writer's method of treatment. Cases in proliferative stage.

Prognosis: First type cure possible, if taken early; can be checked in second type, relief of pain and betterment of joint trouble certain.

Writer's treatment: Internally—Tablets of the Thymus substance Gr. 5 given four times daily, every sixth day an additional 5 Gr. is given until pains have disappeared. This usually requires 35 Gr. per day; but dosage should be increased repeatedly until effect. Having reached this point the dosage must be continued for some time, and then reduced in inverse order.

Locally: Mecano-therapy in its varying forms, especially helio-therapy; vibro-therapy; and massage.

*Abstract from *The Medical Council*, Philadelphia.

EDITORIAL NOTES

Dr. J. L. McLaren will attend the Clinical Congress of Surgeons of North America that meets in London, July 27.

Miss Beulah Wright, Dean of the College of Oratory of the University of Southern California, who annually gives the nurses of the California Hospital a course in the speaking and reading voice is now spending a few months in special study in London.

The University of Pennsylvania Alumni Association of the Southwest at a recent meeting voted to raise money by personal subscription to send some poor but deserving young man to their

Alma Mater for his University training. This Alumni Association numbering over 150, has many prominent professional and business men in its ranks, in Los Angeles and vicinity.

W. L. Huggins, is visiting surgical clinics and hospitals at Kansas City, Rochester and St. Paul.

Sanatorium or sanitarium. About seven acres, with a main building, six cottages and garage. Good location and ample water. Reasonable terms to reliable party. References gladly exchanged. An excellent opportunity for somebody. If you mean business, address Miss Mary Scott, Santa Barbara, for particulars.

BOOK REVIEWS

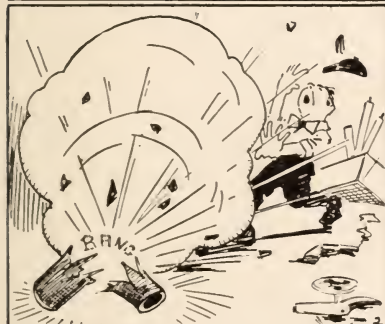
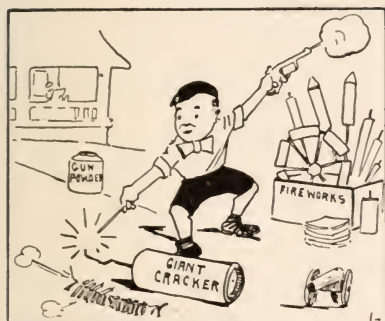
PSYCHANALYSIS. Second Edition, by A. A. Brill, Ph.D., M.D.

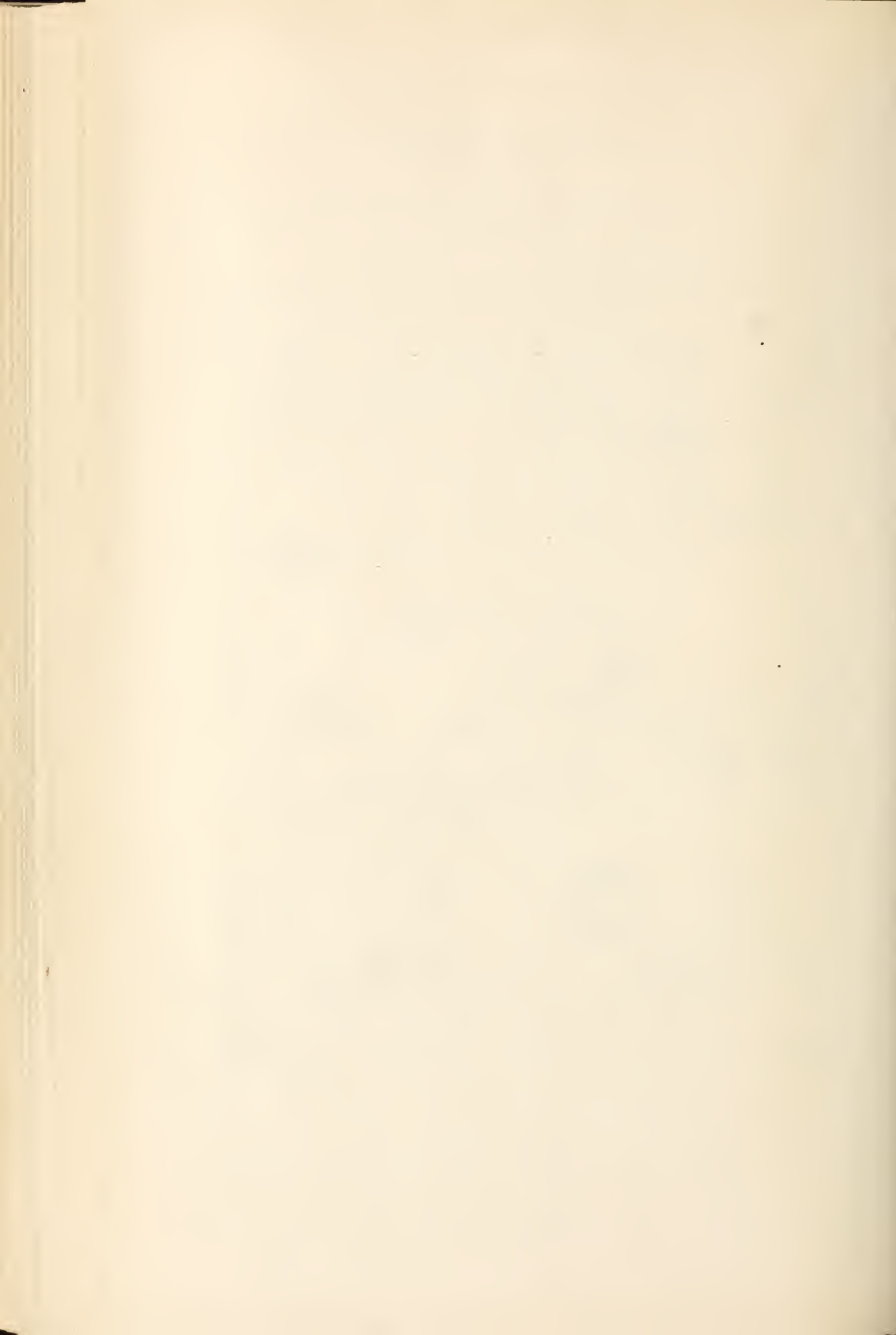
The subject of Freud's *Psychanalysis* is bound to meet with severe critics and opponents from its very nature, inasmuch as it lays bare to view the very things that every human being normal, or abnormal, represses and relegates to the sub-conscious. But its critics have held the pulpit somewhat exclusively, hence the reviewer makes no apology for possible prejudice resulting from being a confirmed Freudian and former associate in hospitals with Dr. Ernest Jones, to whose observations Dr. Brill makes frequent reference in his admirable second edition of *Psychanalysis*. After making full allowance for this mental attitude we are able to say that this is the most systematic, condensed and instructive work on the subject that we have ever read. So clear is it that any medical man without special previous knowledge of psychology will have no difficulty in following the arguments from beginning to end and of obtaining an insight in-

to the principles and practice of psychanalysis sufficient to fire his enthusiasm and illumine his relations with the neurotic and hysterical portion of his practice. Dr. Brill, however, has not omitted a timely warning as to the harm that may be done by "wild psychanalysts" and this is especially applicable to those of the laity who have gathered a smattering of Freud. Dr. Brill emphasizes the importance of a thorough previous experience of organic neurology and of psychiatry. On page 229 in a section on misprints, is an account of a misprint in the "Wicked Bible" and the statement that the printer had to pay 2000 pounds sterling for an omission. The printer of Brill's *Psychanalysis* has spelled this word "ommission." One fails to find similar redundancy elsewhere in the book, and the suggestion that the printer's mistake on the side of excess was determined by the nature of the text is tempting. An error at the bottom of page 243 in which "their wishes" is given instead of "our

THE INSANE WAY AND—

THE SANE WAY





wishes" is directly attributable to Dr. Brill's psychanalytical mental attitude. But what shall we say of the misprint "taken" on page 194? In conclusion we feel convinced that those who read Dr. Brill's work faithfully and critically (and its interest is absorbing) will be convinced that there are no accidents in mental process and that Dr. Brill has put into their hands a straightforward guide to the most difficult art of elucidating the determining factors in the miseries of many otherwise valuable citizens. There is much that is original, both in observation and thought, and the volume is replete with interesting personal experience. As Dr. Jones quotes on the forepage of his *Psychanalysis* "It is impossible to tell the truth so that it shall be understood and not believed."

Abstract of article in the:

"VENEREAL PROPHYLAXIS—PAST AND PRESENT."

Robt. A. Bachman, Surg. U. S. N.—
U. S. S. Delaware, New York City.
Medical Record (N. Y.) Oct. 4, 1913

This article reviews the entire subject of venereal prophylaxis from the first attempts of Frankoster to combat venereal infection with lemon juice as early as 1532 to the present day. Nearly all the well known antiseptics have been employed for this purpose some time or other, but not until Metchnikoff's experiments with calomel salve in the prevention of syphilis, was any real progress made. The latest development of the idea is shown in the tubes devised by the author for use in the navy.

Contrary to general opinion, prophylaxis in the army and navy has been a failure chiefly because the time of application is delayed too long—usually more than eight hours after contact has occurred. Another reason is that few

calomel ointments, whether used in tubes or in the dispensary of the ships or barracks, are made according to Metchnikoff's formula. Too much carelessness exists.

The tube devised by the author provides a means of immediate application. Metchnikoff's ointment is modified so that it prevents gonorrhea and chancreoid as well as syphilis. Laboratory experiments were made with actual cases having gonorrhea in which the urethra was filled with the ointment to be tested. Some tubes used in the army failed to sterilize any of six urethras. The navy tube was successful in nine out of sixteen cases and the growth in all of the cases was reduced. Growths were made on ascites-agar.

Some interesting cases are also cited where altogether seven men had relations with luetic women and remained uninfected after using calomel salve, while accidental control cases without prophylaxis developed syphilis. Twelve similar cases are reported where protection against gonorrhea was afforded. In the navy recently 923 of the Bachmann tubes were traced and no infection of any kind had followed their use.

LARGE CHROMIC IRON ORE DEPOSITS IN CALIFORNIA.

Deposits of chromic iron ore occur in Maryland and the adjacent portion of Pennsylvania, in North Carolina, and in Wyoming, but the only deposits operated in the United States within recent years are in California. Numerous deposits have been reported in 32 counties of that State according to the United States Geological Survey, and many of them could be worked if the demand for the ore and its value warranted exploitation. The available deposits, with much in reserve, largely exceed the local demand for refractory material in a field extending as far east as the Rocky Mountains.

MISCELLANEOUS

STATE SANATORIUM BILL.

An Act Authorizing the Construction, Acquisition, Maintenance, Operation and Control of a System of State Sanatoriums, Dispensaries, Hospitals and Other Agencies In and For the State of California for the Prevention of Tuberculosis and the Care and Cure of Persons Affected With Tuberculosis in the State of California: Specifying the Work: Providing for the Issuance and Sale of State Bonds to Create a Fund for the Construction, Acquisition, Maintenance, Operation and Control of Such System: Creating a Sinking Fund for the Payment of Said Bonds, and Creating a State Advisory Board on the Care and Prevention of Tuberculosis.

The People of the State of California do enact as follows:

Section 1. A system of state sanatoriums, dispensaries, hospitals and other agencies in and for the State of California for the prevention of tuberculosis and the care and cure of persons affected with tuberculosis in the State of California, shall be constructed, acquired, maintained and controlled as and in the manner provided by law by the State Board of Health of the State of California at a cost of not to exceed One Million Dollars.

For the purpose of providing for the payment of the cost of the construction, acquisition, maintenance and control of said system of said sanatoriums, dispensaries, hospitals and other agencies, the State of California is hereby authorized to incur an indebtedness in the manner provided by this act in the sum of One Million Dollars.

Immediately after this act shall take effect the treasurer of the State shall prepare one thousand suitable bonds of the State of California in the denomination of One Thousand Dollars each, to be numbered from 1 to 1000 inclu-

sive, and to bear the date of the third day of July, 1915. The total issue of said bonds shall not exceed the sum of One Million Dollars and they shall bear interest at the rate of five per cent per annum from the date of issuance thereof. The said bonds and the interest thereon shall be payable in gold coin of the United States of the present standard of value at the office of the Treasurer of said State at the times and in the manner following, to-wit: The first one hundred of said bonds shall be due and payable on the third day of July, 1920, and twenty of said bonds in consecutive numerical order shall be due and payable on the third day of July in each and every year thereafter until and including the third day of July, 1965. The interest accruing on all of said bonds that shall be sold shall be payable at the office of the treasurer of the State of California on the third day of January and the third day of July of each and every year after the sale of the same. The interest on all bonds issued and sold shall cease on the day of their maturity and the said bonds so issued and sold shall on the day of their maturity be paid as herein provided and canceled by the treasurer of said state. All bonds remaining unsold shall, at the date of the maturity thereof be by the treasurer of the state canceled and destroyed. All bonds issued pursuant to the provisions of this act shall be signed by the governor of this state, countersigned by the state controller and endorsed by the state treasurer, and the said bonds shall be so signed, countersigned and endorsed by the officers who are in office on the third day of July, 1915, and each of said bonds shall have the great seal of the State of California impressed thereon. The said bonds, signed, countersigned, endorsed and sealed as herein provided, when sold, shall be

A SAFE FOURTH MEANS A HAPPY HOME



THERE WERE FEWER ACCIDENTS THIS YEAR THAN EVER BEFORE, BUT STILL TOO MANY-



and continue a valid and binding obligation upon the State of California, though the sale thereof be made at a date or dates after the persons so signing, countersigning and endorsing, or either of them, shall have ceased to be the incumbents of said office or offices.

Sec. 2. Appended to each of said bonds there shall be interest coupons so attached that the same may be detached without injury to or mutilation of said bond. The said coupons shall be consecutively numbered and shall bear the lithographed signature of the state treasurer who shall be in office on the third day of July, 1915. No interest shall be paid on any of said bonds for such time as may intervene between the date of said bond and the day of sale thereof, unless such accrued interest shall have been, by the purchaser of said bond, paid to the state at the time of such sale.

Sec. 3. There shall be provided by the state legislature at its regular session in the year 1915 in the general appropriation bill sufficient money to defray all expenses that shall be incurred by the state treasurer in the preparation of said bonds and in the advertising of the sale thereof as in this act provided.

Sec. 4. When the bonds authorized by this act to be issued shall have been signed, countersigned, endorsed and sealed as in section one provided, the state Treasurer shall sell the same in such parcels and numbers as the governor of the state shall direct, to the highest bidder for cash. The governor of the state shall issue to the state treasurer such direction immediately after being requested so to do, through and by a resolution duly adopted and passed by a majority vote of the state board of health. Said resolution shall specify the amount of money which, in the judgment of said state board of health, shall be required at such time, and the governor of the state shall direct the state treasurer to sell such

number of said bonds as may be required to raise said amount of money and that said bonds shall be sold in consecutive numerical order commencing with the first one hundred thereof. The state treasurer shall not accept any bid which is less than the par value of the bond plus the interest which has accrued thereon between the date of sale and the last preceding interest maturity date. The state treasurer may at the time and place fixed by him for said sale continue such sale as to the whole or any part of the bonds offered to such time and place as he may at the time of such continuance designate. Before offering any of said bonds for sale, the state treasurer shall detach therefrom all coupons which have matured or will mature before the date fixed for such sale. The state treasurer shall give notice of the time and place of sale by publication in two newspapers published in the city and county of San Francisco, and in one newspaper published in the city of Oakland, and in one newspaper published in the city of Los Angeles, and in one newspaper published in the city of Sacramento once a week for four weeks next preceding the date fixed for such sale. In addition to the notice last above provided for, the state treasurer may give such further notice as he may deem advisable, but the expenses and cost of such additional notice shall not exceed the sum of five hundred dollars for each sale so advertised.

There is hereby created in and for the state treasury a fund to be known and designated as the "State Tuberculosis Fund," and immediately after such sale of bonds the treasurer of the state shall pay into the state treasury and cause to be placed in said "State Tuberculosis Fund" the total amount received for said bonds, except such amount as may have been paid as accrued interest thereon. The amount that shall have been paid at such sale

as accrued interest on the bonds sold shall be by the treasurer of the state immediately after such sale, paid into the treasury of the state and placed in the interest and sinking fund.

The moneys placed in the "State Tuberculosis Fund," pursuant to the provisions of this section, shall be used exclusively for the acquisition, construction, maintenance, control and operation of said system of state sanatoriums, dispensaries, hospitals and other agencies and for the purchase of suitable sites for the location of the units of the said system.

Moneys shall be drawn from said "State Tuberculosis Fund" for the purposes of this act upon warrants duly drawn by the controller of the state upon demands made by the state board of health and audited by the state board of examiners.

Sec. 5. It shall be the duty of the state legislature at each regular session after the passage of this act and until and including the year 1965 to appropriate from the general fund in the state treasury such sum annually as will be necessary to pay the principal of and the interest on the bonds issued and sold pursuant to the provisions of this act, as said principal and interest become due and payable.

There shall be collected annually in the same manner and at the same time as other state revenue is collected such a sum, in addition to the ordinary revenues of the state as shall be required to pay the principal and interest on said bonds as herein provided, and it is hereby made the duty of all officers charged by law with any duty in regard to the collection of said revenue, to do and perform each and every act which shall be necessary to collect such additional sum.

The treasurer of the state shall, on the first day of January, 1916, and on the first day of each July and the first day of each January thereafter transfer from the general fund of the

state treasury to the interest and sinking fund such an amount of the money directed by this act to be appropriated as shall be required to pay the interest on the bonds theretofore sold, until the interest on all of said bonds so sold shall have been paid or shall have become due in accordance with the provisions of this act.

There is hereby created in the state treasury a fund, to be known as the "State Tuberculosis and Sinking Fund." The treasurer of the state shall on the first day of July of the year 1920, and on the first day of July of each and every year thereafter in which a parcel of the bonds sold pursuant to the provisions of this act shall become due, transfer from the general fund of the state treasury to the said "State Tuberculosis and Sinking Fund" such an amount of the moneys directed to be appropriated by this act as may be required to pay the principal of the bonds so becoming due and payable in such years.

Sec. 6. The principal of all of said bonds sold shall be paid at the time the same becomes due from the "State Tuberculosis and Sinking Fund," and the interest on all bonds sold shall be paid at the time said interest becomes due, from the interest and sinking fund. Both principal and interest shall be so paid upon warrants duly drawn by the controller of the state upon demands audited by the state board of examiners, and the faith of the State of California is hereby pledged for the payment of the principal of the bonds so sold, and the interest accruing thereon.

Sec. 7. The state controller and state treasurer shall keep full and particular account and record of all their proceedings under this act and they shall transmit to the governor in triplicate an abstract of all such proceedings thereunder with an annual report in triplicate, one copy of each to be by the governor laid before each house

of the legislature biennially. All books and papers pertaining to the matter provided for in this act shall, at all times, be open to the inspection of any party interested, or the governor, or the attorney general, or a committee of either branch of the legislature or a joint committee of both, or any citizen of the state.

Sec. 8. The state board of health, in the name of the people of the State of California, may select and purchase or receive by donation suitable sites necessary or proper for the location, construction, use or maintenance of the units of said system. The state board of health shall have full power and authority, and said state board of health is hereby empowered and authorized, to erect suitable and necessary buildings and structures, and to purchase and provide all supplies, materials, machinery, apparatus, and equipment and to do all other things necessary and proper in the acquisition, construction, maintenance and administration of the units of said system. The state board of health shall have the direct control and administration of said system and it may make rules and regulations for the government of the same.

Sec. 9. There is hereby created a state advisory board on the care and prevention of tuberculosis, consisting of five members, who shall be appointed by the governor from a list of names suggested by the California Association for the Study and Prevention of Tuberculosis and the State Board of Health, and their term of office shall be at the pleasure of the governor. The said advisory board shall advise with and make recommendation to the state board of health in all matters relating to the construction, acquisition, maintenance and operation of said system. The said advisory board shall serve without salary, but they shall be allowed their actual expenses, which shall be paid out of the funds derived from the sale of

said bonds herein provided. But not more than three per cent of the full amount derived from the sale of said bonds shall be used for clerical or other expenses of the said advisory board, and not more than one per cent of the full amount shall be used by said board in any one year.

Sec. 10. The sanatoriums, dispensaries, hospitals and other agencies constituting said system shall be open for the treatment of all persons affected with tuberculosis who are taxpayers of the State of California or who shall have lived in the State of California at least five years prior to the time of application for treatment; and the dispensaries of said system shall be open for the benefit of all persons affected with tuberculosis irrespective of length of residence in California or of being taxpayers of the State of California; provided, however, that the said advisory board or the state board of health shall have power, in their discretion, in cases of temporary emergency, to admit persons so affected and provide treatment for them for a limited period, although not residents or taxpayers of the State of California.

Sec. 11. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

THE FRIEDMANN SERUM AND THE SOCIETY OF GERMAN SAN- ATORIUM PHYSICIANS.

A sensational notice appeared in some of the leading New York American and German-American newspapers in which it was stated that on the occasion of the annual meeting of the Association of German Sanatorium Physicians on February 28th, one hundred and twenty of these physicians had carefully investigated the results of Friedmann's work. It was reported that 40,000 cases had been treated with Friedmann's serum and that successes had been simply phenomenal. It

was furthermore stated that Dr. Friedrich Franz Friedmann had been the guest of honor at a banquet given by the sanatorium physicians and that he had been effusively thanked by Privy-Councillor Professor Dr. Pannwitz for his work, in the name of the sanatorium physicians present. Finally, it was said in the newspaper report that Dr. Friedmann had made the statement to an American press representative that Professor Ehrlich had expressed the opinion that the Friedmann serum was absolutely harmless.

In a communication received by the undersigned, bearing the signatures of the President, Dr. O. Pischinger, the Vice-President, Dr. J. Ritter, and the Secretary, Dr. Schellenberg, of the Association of Sanatorium Physicians of Germany, Austria and Switzerland, he was requested to enlighten the American medical profession concerning the incident connected with their visit to the Friedmann Institute in Berlin, and to give the facts the widest possible publicity at least among medical men.

First of all, the officers of the association expressed their astonishment that the visit of the sanatorium physicians to the Friedmann Institute should have been used as a means of advertising Friedmann and his remedy abroad. Because of the reports of cures which constantly crept into the German medical and lay press and the demands for the remedy from many sanatorium patients, it was natural that the sanatorium physicians while visiting Berlin should wish to see for themselves what was going on in the Friedmann Institute. Thus they asked Friedmann to show them his cases and give them a talk on the indication for his remedy. About 60 of the 125 members of the association visited the Friedmann Institute on the 26th and 27th of February, 1914. They distinctly stated that their visit was in no way to be considered a pilgrimage to pay homage to Friedmann for his dis-

covery but rather an investigation to find out just how much truth was in his claims. Many had already tried the remedy and had been disappointed, others were prejudiced, and it is for this reason that they wanted to examine critically into Friedmann's claims. It is absolutely untrue that a banquet was given to Friedmann. After the conclusion of the visit there was a confidential conference, without Dr. Friedmann, at which the members concluded to discuss the theme again next fall and in the meantime collect as much material as possible.

That the undersigned may not be accused of prejudice or misinterpretation, I wish to quote in German the most essential statements which were made as the result of the visit of the association to the Friedmann Institute:

"Wir waren uns darüber einig, dass die uns von Friedmann gezeigten Fälle klinisch recht schlecht beobachtet waren und im Allgemeinen keineswegs als "Erfolge" angesehen werden konnten. Wir haben uns gewundert, dass uns keine ordnungsmässig geführte Kurve gezeigt wurde. Die Roentgenplatten, die man uns zum Beweis zeigte, bewiesen tatsächlich gar nichts. Wir geben zu, dass einzelne Fälle allerdings einen gewissen Eindruck auf uns gemacht haben, wobei wir uns aber auch darüber klar waren, dass solche Fälle auch ohne jede Behandlung und bei jeder Behandlung vorkommen können, und dass die Zahl dieser Fälle verhältnissmässig viel zu klein war, um ein günstiges Urteil über das Mittel abgeben zu können."

(We were of the unanimous opinion that the cases shown by Friedmann had been clinically very badly observed, and as a whole could not be considered as successes or cures. We were astonished that no carefully recorded temperature and weight curves were shown. The X-ray plates which were shown to us as evidence of cures did not actually prove anything whatso-

ever. We will admit that some cases indeed made an impression upon us, but here we must also remember that such cases occur without any treatment or with any kind of treatment, and that the number of them were altogether too few to permit a favorable judgment of the value of the remedy.)

I have since received a letter from Geheimrat Prof. Dr. Pannwitz in which he substantiates what has been said in the official communication from Drs. Pischinger, Ritter and Schellenberg. He particularly expresses his indignation at the use of his name in connection with a banquet which never took place. He declared the whole thing to be a newspaper invention.

Prof. Dr. L. Brauer, Director of the Eppendorfer Krankenhaus of Hamburg, who had also heard the American version of the sanatorium physicians' visit to the Friedmann Institute in Berlin, wrote me a letter full of indignation and said at the same time that "he had tried Friedmann's remedy at the Eppendorfer Krankenhaus and the results had been unfavorable." He has reported these unfavorable results recently at the Balneological Congress and the Hamburger Aertze Verein, and intends to publish more on the subject at an early date. He has since sent me the advance sheets of his forthcoming communication regarding Friedmann wherein he says: "The pulmonary cases treated in the Eppendorfer and Salemburg hospitals with Friedmann's method did not improve, but some of them without a shadow of doubt were rendered worse by the treatment. Five cases of bone and joint tuberculosis in children treated with the Friedmann serum by Dr. Trepler in the Salemburg institution were not influenced at all by the treatment and in one case, although the movement of the afflicted joint increased, the general condition of the lesions was rendered worse."

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In paying a gratifying tribute to the earnest and unbiased work done with Friedmann's serum by American investigators, which likewise gave unfavorable results, Professor Brauer advised me, in the interest of the German medical profession, and especially in the interest of the unfortunate patients who naturally are inclined to accept such advertised endorsement as genuine, that it would be most desirable for the present status of the Friedmann remedy in Germany to be made clear to the American medical profession and the laity.

I am sure, our German colleagues in general and particularly the German sanatorium physicians, Professors Pannwitz and Brauer, will be greatly indebted to you, Mr. Editor, if you will give the foregoing space in your es-

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teemed journal and thus make clear the real status of Friedmann's remedy in Germany.

Respectfully yours,

S. A. KNOFF, M. D.

SYPHILIS OF THE EYE.

(Jour. of the Med. Soc. of New Jersey, Sept., 1913.)

In this paper, which was part of a symposium on syphilis, read at the

annual meeting of the New Jersey State Medical Society, Dr. Elbert S. Sherman of Newark takes up briefly some of the more common syphilitic eye diseases.

Iritis is stated to be the most frequent eye complication of syphilis occurring in about 3 per cent of cases and may appear in any stage, but usually during the secondary stage. There is nothing characteristic of syphilitic iritis except a greater tendency to the formation of posterior synechiae

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and blocking of the pupil with exudate. Treatment is very satisfactory if begun early, but vision may be partly or even completely destroyed if the pupil is not promptly dilated with a mydriatic. The writer advocates the free use of atropine, dionin and hot compresses, and mercury, preferably by inunction, with or without salvarsan, according to circumstances.

Paralysis of one or more of the ocular muscles is given as a common late manifestation of syphilis caused by a gumma or an endarteritis in, or at the base of the brain and accompanied by one or more of the following symptoms: ptosis, diplopia, paralysis of accommodation, dilated pupil.

In discussing parenchymatous keratitis which is usually caused by hereditary syphilis, the writer emphasizes the value of the Wassermann reaction in cases of doubtful etiology. In congenital syphilis the reaction is very constant and in general, strong, as compared with that found in acquired syphilis. According to Browning and McKenzie a negative reaction in a case presenting active lesions is strongly against the latter being due to congenital syphilis.

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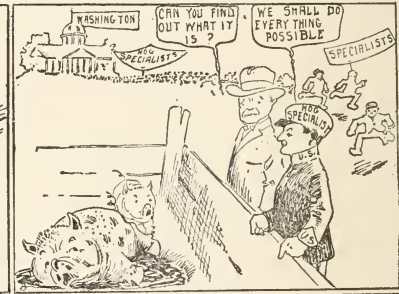
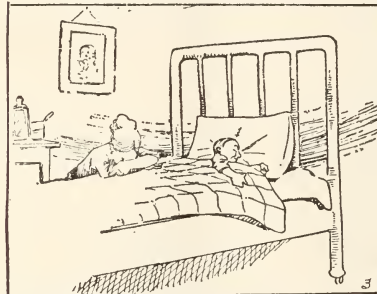
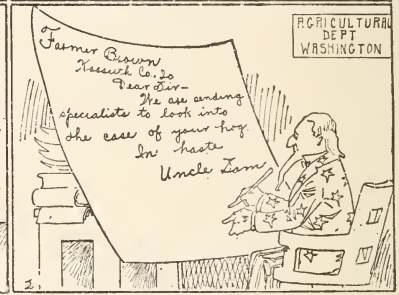
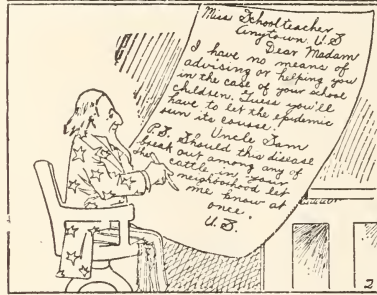
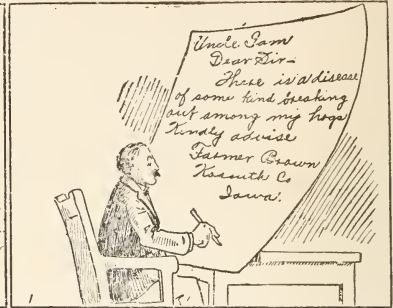
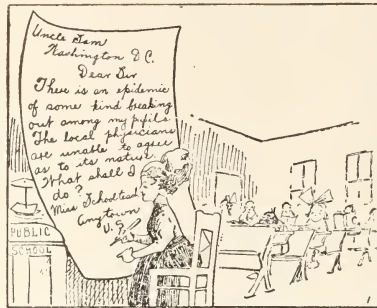
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CHOLECYSTECTOMY WITH REPORT OF FOUR CASES OF HYDROPS.*

BY H. W. EDWARDS, M.D., B.Sc., MARSH-STRONG BLDG., LOS ANGELES

Operative work on the gall-bladder has been very satisfactory to the surgeon, especially to the man who has had a series of fifty cases for comparison; and more especially to the great Clinician who has had the opportunity to observe hundreds, yes thousands, of such cases.

We who practice surgery are not infrequently placed in the same category as Judges on a capital case, on which not only one, but many lives depend. The pathology of the gall-bladder is very variable and from that small focus of infection that once existed may develop those grave conditions, the mortality which still elings to both medical and surgical treatment.

The public have become well educated by the untiring and never ceasing efforts of Physician and Surgeon since McBurney gave us the muscle splitting incision, that the involvement of the Appendix was purely a Surgical disease,

and in the vast majority of cases, the sooner the removal the greater the result.

With the gall-bladder a crusade by the entire Profession should begin, enlightening those that are so affected that for results, or a permanent cure, they are far better off to have their gall-bladder drained or removed, as the conditions justify, than to permit a well established nidus of infection to perform gross pathology and to extend itself to the neighboring organs. The gall bladder being a sacculated pouch with only a small opening through the cystic duct, is especially suited for poor drainage.

Before we consider some of the well defined conditions that are positive indications for Cholecystectomy, I deem it prudent that a few words concerning the function of the gall-bladder would not be out of place.

In the first place remember that the gall-bladder holds 1 to 1½ ounces and that the liver secretes from 40 to 60 ounces of bile in the adult in 24 hours;

*Read before the Medical Society of the University of Southern California, April 1, 1914.

also that the gall-bladder does possess imperfect contractability for a storage organ, due especially to its anatomical make up. Three-fourths being free, covered by Peritoneum, the remaining one-fourth united by fibrous connective tissue to the sulcus beneath the right lobe of the liver, consequently the muscular coats of the gall-bladder are not capable of expelling its contents completely, which per-see would invite stagnation.

The old idea which has been taught by Physiologists for decades back that the gall-bladder served as a reservoir for bile, during the period it was not needed, is not commensurate with the amount of bile excreted, nor with its own capacity. The mucus that this bladder secretes is believed to act as a beneficial dilutant, especially so, if there be any regurgitation into the ducts of Wirsung or Santorini. The suggestion comes now that it acts as a tension bulb, has really much to commend it. I can really appreciate the fluctuations in pressure within the ducts, which probably does occur in digestion, and the influences which increase or diminish the secretory activity of the Liver cells. Yes, Pathological conditions, we can readily understand, would produce variations in pressure; so by possessing a diverticulum, so connected with the duct tract, undoubtedly the back pressure upon the pannchyma of the Liver cells may be greatly modified. When normal it seems to subserve us for a good purpose, but yet it can not be contradicted that its presence is not necessary for good health. Do not forget that Pathology changes their functions and that they may become very detrimental.

There are many conditions that are positive indications for Cholecystectomy which are becoming stereotyped on the brain of every surgeon, namely:

- (1) A great contracted Gall-bladder.
- (2) Phlegmonous cholecystitis, and its sequel gangrene.

(3) In multiple superficial ulceration, with or without perforation, known chiefly as Chronic Emphyema.

(4) Calcareous degeneration.

(5) That with a bladder that has a well defined mesentery, occurring in about five in every hundred cases.

(6) Cholesterin Gall-bladder of Moynihan in which the small Cholesterin stones are embedded in the mucosa of the bladder, which can not be scraped out or disposed of by drainage.

(7) In carcinoma localized to the bladder.

(8) Extensive lacerations.

(9) And lastly, Hydrops with obliteration of the Cystic duct.

While these conditions are most positive in the vast majority of cases, I can conceive that the skillful, artistic surgeon may have to vary to meet some complication.

The four cases of Hydrops that I wish to report are interesting from the fact of their close similarity, namely: All possessed the same pathological cause, and all had had a Cholecystostomy performed more than twelve months back.

September 25, 1907, Mrs. S.—, housewife, age 44, consulted me with symptoms of Cholelithiasis. Operation advised, which we performed and removed one burr stone about the size of a blue-jay's egg. Drainage was established for seventeen days, after which the patient made an uninterrupted recovery, with abatement of previous symptoms, in a few weeks gained twenty-two pounds, and considered herself in perfect health. Remained well until seventeen months after the operation. She then began to notice some uneasy feeling in the right hypochondriac region, which continued to grow worse for the following three months, amounting to considerable pain, gastric disturbance and loss of weight. A second operation was advised and at this seance I performed a Cholecystectomy. It was a typical case of Hydrops, with no adhe-

sions between the parretis, colon or duodenum. The bladder was greatly distended, possessing the capacity of a teacup. The walls were very thin with a translucent appearance. Contents watery with some mucus.

January 13, 1908, Mrs. L.—, age 38, housewife, pronounced, after spending much time on her case during the following two weeks we were able by elimination to centralize our thoughts on the gall-bladder. Cholecystostomy was performed and a small burr stone was removed. In this case drainage was instituted for 21 days. Patient recovered and was in good health for two and one-half years. In May, 1911, she consulted me again for what she called stomach trouble, which had been developing the last five or six months. On physical examination we found the focus of the trouble was in the Gall-bladder. Second operation was advised and a Cholecystectomy at this time was performed. Another case of Hydrops with no adhesions, bladder distended to about $\frac{3}{4}$ teacup in capacity.

March 25, 1909, Mr. H.—, Contractor, 47 years, consulted me with evidences of Gall-bladder trouble. Said he had been operated on by a surgeon in St. Paul 6 years ago for gall stones, and that he had removed one stone. Stated that he had been in good health until about one year ago when he began to notice an occasional darting pain in the gall-bladder region. This developed into at times a dull ache, with a sense of fullness and some eructations of gas. After examination we advised an operation. Cholecystectomy was performed and the bladder was dilated more than either of the two preceding cases. No adhesions, but with a bladder which was showing evidences of hypertrophy with its dilatation. Its contents possessed more mucus in the watery solution.

Case 4, was one in which I was in consultation with another Surgeon, the findings of which and history was prac-

tically identical with Case 1, which I have reported.

Now we must ask ourselves the question, "What happened that brought about a condition that made Cholecystectomy the operation of choice?"

You remember in each one of these cases a single stone had been found and that we called them a burr stone, for the fact that their surfaces were rough, hard, and composed principally of calcium carbonate. These stones were not impacted, could not get into the cystic duct, for the fact that they were too large, and were easily delivered from the neck of the Gall-bladder. But now, these stones had evidently been for years having a slow, plunger-like effect (due to the relaxation and contraction of the Gall-bladder) upon the structures adjoining of the neck with the cystic duct. The removing of the stone and establishing good drainage was not sufficient to prevent cicatricial contraction which did gradually occur with complete closure months afterwards.

In the operative work on the Gall-bladder to remove, or not to remove, is the surgeon's enigma, which at times by simulation makes Hamlets of us all.

Secondary operations are seldom needed after the Gall-bladder is removed, for the hive of infection has been eradicated.

The stronger advocates for the more frequent performance of Cholecystectomy, argue that the Gall-bladder is a vestigial and unnecessary organ; also that a permanent cure is not assured by drainage; that reinfection occurs not infrequently, requiring re-operation, or re-establishing invalidism on the part of the patient. It is interesting to note that the drainage from the Lymphatics of the Gall-bladder to those of the stomach, duodenum and pancreas, are somewhat analogous to that of the tonsils and cervical glands. In other words the Lymphatics are collected into trunks which travel along the cystic duct to

the right free border of the gastro-hepatic omentum, following the course of the common duct. Some of these trunks are interrupted in their course by lymphatic nodes. They anastomose very freely with the lymphatics around the pancreas, duodenum and stomach. This accounting for the frequent association with Gall-bladder diseases, pancreatic and peripancreatic inflammation, conditions, when found, should cause us to treat the Gall-bladder from a very conservative standpoint. So recognizing the close lymphatic relation of these organs, who knows but what the nidus of infection may have once existed in a poorly drained Gall-bladder, which has been swept down the lymphatic stream, and finally localizing itself to become the exciting cause for some gastric or duodenal ulcer.

The mortality rate given for Cholecystostomy ranges from one to two per cent. And in Cholecystectomy from 3 to 4 per cent. The higher mortality rate in the latter is due to the fact that we have to deal with a more serious diseased condition.

In performing this work it is very necessary to be thoroughly familiar with the normal anatomy, and the variation which may occur, whether of congenital or pathological origin. The technique for performing Cholecystectomy should be well understood and well planned. In the first place to perform skillfully and with ease this operation, we must have perfect relaxation of the abdominal muscles, which can be best obtained by ether anaesthesia; gas and oxygen not being so well suited. A good sized sand bag placed under the lower thoracic spine for the purpose of rotating forward the Gall-bladder and ducts, has much for commendation. The incision is matter of choice. The Mayo Robeson incision can be used to a very good advantage. It is a vertical one, the upper end starting at the costal margin, passes down for about 4 or 5 inches, going through the right

rectus near its outer border. Now cutting obliquely upward and inward, dividing the fibres of the rectus about one-half inch from the costal margin, usually gives us a good exposure. After the examination if possible rotate the liver outward, by dislocating the liver downward and upward, bringing it partly out of the incision, after the manner of Monyhan. This is accomplished by seizing the margins with gauze, taking care not to crush the friable parenchyma. If this can be accomplished it brings the cystic and common ducts nearer the surface.

If adhesions are found it is of first importance to clear them from the Gall-bladder, but be careful if firm adhesions are existing between the bladder and duodenum, for this viscus is one of the most sensitive portions of the Alimentary Canal, which, if wounded, may cause our patient a great deal of shock. The rule for avoidance is, in making our dissection, keep close to the gall-bladder. Omental adhesions are comparatively easy to handle, but these firm unions are the ones which require skill and good judgment.

Keep in mind little soiling, and as much protection to the adjacent tissues as possible. The Gall-bladder and cystic duct having been freed, we now place a clamp on the cystic duct and cystic artery; then catching the duct again just distal to the first clamp. The duct is cut between the two and the organ dissected from its fibrous bed from below upwards, rather than dissecting it from the liver tissue, which is more likely to leave a lacerated surface with oozing that is difficult to control, especially when jaundice is present.

Keep in mind that when placing the ligature around the cystic duct and artery not to pull up the common and hepatic ducts at their point of junction with the cystic, which might become included in our ligature, meaning obstruction, or at least partial obstruction to our patient. Over-sewing the fossa of

the Gall-bladder and obliterating it nearly completes the operation.

Shall we use drainage? Yes, by all means. We do not know but that our ligature around the cystic duct might slip, forced off by the back pressure of the bile. And on the other hand our field may have become infected. A small rubber tube carried down to the stump of the cystic duct and anchored

by one catgut ligature may be instrumental in the saving of the life of some patient. If there be any infection in the case in all probability the kidney well may be the recipient. So now a good size cigarette drain, the end of which placed in this fossa and brought out through the parietes by a stab wound, may be the ounce of prevention that will accomplish the cure.

THE SECRET DIVISION OF FEES.

BY. DR. ANDREW S. LOBINGER, LOS ANGELES

When I was last abroad a distinguished foreign surgeon said to me, "Is it true that I hear of American surgeons, that many of them pay commissions by secretly dividing their fees with general practitioners in order to secure a larger clientele and a more lucrative income?" "It is not true of reputable American surgeons," I replied; for I was inspired by a spirit of patriotism toward the guild of sincere and upright men whose work and fame have lent lustre to the art of surgery in this country.

If my answer may have seemed somewhat evasive and short of the precise truth, it was because it should be true, if it is not, of all who are clothed with the sacred duties and responsibilities of the practicing surgeon.

Just what the genesis of this vice, which has brought such shame by its prevalence as to amount to a public scandal, may be ascribed to, would be difficult to say. I have preferred to believe it has had its origin not so much in cupidity, as in the disposition of the surgeon to be hospitable and gracious to the physician in general practice who feels certain proprietary rights in the patient he refers and which he can only reluctantly relinquish. I have chosen to seem generous in this view of the inception of this vice rather than to captiously take the harsher view so commonly held.

Fifteen years ago this species of grafting was held to be the besetting sin of western surgery. Our eastern brethren scouted with scorn the imputation of its existence amongst them.

It is probable that the prevalence of this scandal, which within recent years has been so flagrant that even the lay press has exposed and discussed it, has been widespread and not confined to any section of our country. It may be that its practice has been less concealed in the west; we are inclined to believe it has been. But if so, it is equally true that the crusade is being waged against it as actively in the west as in the east.

Sporadic efforts to expose and remedy this evil have been made for more than ten years. Seven or eight years ago the president of the Illinois State Medical Society read a paper in Chicago which was so forceful as to arouse the interest not only of the profession of that great state but of the whole country. In 1908 Dr. John C. Munro of Boston delivered an address before the Canadian Medical Association which dealt with the relation of the physician to the surgeon and with the secret division of fees question as no other American has ever spoken on these subjects. The address was published in the Boston Medical and Surgical Journal, August 20, 1908, and attracted the widest notice because of its fearless

courage and the admirable spirit of ethical conduct which it sought to inculcate.

Four years ago the Council of the Los Angeles County Medical Association appointed a committee of which the writer was chairman to inquire into the prevalence of the fee division evil in Los Angeles and to report back to the Council the result of these investigations. The following resolutions unanimously adopted by the Council speak for themselves:

"Whereas, It has been brought to the attention of the Board of Councilors of the Los Angeles County Medical Association that the secret division of fees between the surgeon and the general practitioner referring a patient to the surgeon, has existed and still prevails among some members of this Association, and

"Whereas, Such secret division of fees tends to place a premium upon the cupidity of the surgeon rather than upon his skill, judgment and ability as an operator, and is subversive of good ethics and the highest consideration of the patient's welfare; therefore be it

"Resolved, That the Board of Councilors of this Association expresses its condemnation of any division of fees between a surgeon or specialist and the general practitioner referring the patient, without the full knowledge and understanding of such decision by the patient; and to this end the Councilors recommend that the general practitioner referring the patient shall have a larger recognition by the surgeon before the patient, for the services which such physician has rendered in making the diagnosis and in his attention to the patient previous to the operation, as well as at the time the operation is performed; and be it further

"Resolved, That the Board of Councilors of this Association shall in future consider instances of the secret division of fees between surgeon and physician a sufficient ethical cause for

the trial and expulsion of any member of this Association; and be it further

"Resolved, That these resolutions be spread upon the minutes and that a copy be sent to each member of this Association, to the Secretary of each County Medical Association in California, and to the Secretary of the Medical Society of the State of California."

Sometime after, each member of the Association was asked to sign a pledge that he would not be a party to secret division of fees in any form.

Even then, however, it was difficult to interest the influential medical press editorially on the importance of this subject. As we look back on it now, it seems incredible that such apathy could have existed on a question now so widely accepted as one of the most vital ethical problems before us today. When, however, a year ago the American Medical Association through its Judicial Council made its report on the evil and began a systematic propaganda of education, showing the deteriorating influences of such specious methods of obtaining surgical practice and its ruinous influence on the ethical standards of our young men beginning professional life, it was obvious that no one could longer doubt the widespread conviction that such an evil must speedily be corrected.

The House of Delegates of the American Medical Association at the Atlantic City meeting held in June, 1912, instructed the Judicial Council to investigate and report the next June on the secret division of fees and taking of commissions. In compliance with these instructions, the Judicial Council framed and sent out to the profession all over the United States this list of questions:

"1. How prevalent is the secret division of fees (i. e. without the full knowledge of the patient) in your community?

"2. Are you practicing one of the specialties? If so, what?

“(a) How often have you been asked during the year 1912 by those referring patients to you to divide the fee or grant a commission?”

“(b) How often have you been offered a part of the fee or a commission for referring cases?”

“(c) In how many instances was the patient acquainted with the terms according to which the division was to be made?”

“(d) Can the secret division of fees or the granting of commissions be justified? If so, on what grounds?”

“3. In your locality do the hospitals or sanitariums offer commissions for the reference of patients?”

“(a) Do pharmacists offer or give commissions? Do houses furnishing medical or surgical supplies or appliances offer or give commissions?”

“(b) Do you know of instances of physicians demanding any of the above commissions?”

“(c) How prevalent is this practice?”

“4. What is (a) the cause, and (b) the effect on the profession of the secret division of fees? Of taking or demanding commissions?”

“5. Are your answers to these questions based on personal knowledge or rumor?”

A circular was sent to each president and each secretary of each county society in every state in the United States, and the various sections of the country were further apportioned off to members of the Judicial Council who sent throughout their sections personal letters containing these circulars to various members of the profession **whom** the members of the Judicial Council knew to be prominent in their sections and who would be conversant with the public opinion and the practice of the various members of the profession in their communities. Six thousand circulars were thus sent out and three thousand replies returned, which would represent the average annual attendance

at the meetings of the Association. It may be justly said therefore to be a report founded on the representative opinion of the members of the American Medical Association.

From the statistics thus gathered it is evident that in the matter of secret splitting of fees, while the existence of the practice cannot be denied in any state, the degree of its prevalence varies greatly in different sections of the United States, and the opinion of the local profession for or against it also varies in different regions.

In the New England States—Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island—the practice is not prevalent, though it exists to a slight degree in them all, being most prevalent in and towards the larger cities of Massachusetts and in that part of Connecticut that is near New York.

In New York State the practice varies, some counties being nearly free of it, other counties and the large cities being filled with it. In New York City with its crowded population and with its large proportion of foreigners in some sections of the city, among certain groups of men, it is without doubt the rule rather than the exception, and this is true in spite of the increasingly strong opinion in the profession as a whole against the practice.

In Pennsylvania, it is a little less prevalent than in New York. New Jersey, Delaware, District of Columbia, Maryland, Virginia and West Virginia show a strong sentiment against it and not a great pervulence of the practice. Through the South generally the pervulence is not marked, Georgia, Arkansas, Texas and Tennessee showing a greater predominance of this practice than North and South Carolina, Kentucky, Mississippi, Louisiana, Florida and Alabama. Oklahoma, on the other hand, shows in strong contrast to other Southern states in the great degree of its prevalence and in the stronger general

opinion among the profession in its favor.

Ohio, Indiana, Illinois, Iowa, Kansas, Nebraska, Missouri, North and South Dakota and Wisconsin show the greatest prevalence of this practice anywhere in the United States and the profession is divided between vigorous opposition to the practice and an equally cynical low standard justifying it.

In Minnesota and Michigan, the practice, though prevalent, is less widespread than in the other states just mentioned. Secret fee-splitting is also fairly prevalent in Colorado and Utah. It is much less so in Arizona, New Mexico, Wyoming and Montana. It became prevalent again in Idaho, Washington, Oregon, and is exceedingly prevalent in California.

It is interesting to note that in the replies given stating whether or not secret fee-splitting was justifiable there was 77.3 per cent who answered in the negative, 13.4 who answered in the affirmative, and 9.3 who were doubtful.

The Council goes on to say that by the term, "secret division of fees," is meant the sharing by two or more men in a fee which has been given by the patient supposedly as the reimbursement for the service of one man alone. By "secrecy" is meant that the division of the fee is done without the knowledge of the patient or some representative of the family. It does not include the payment of any bona fide assistants with or without the knowledge of the patient or his representatives. It does include, however, those cases in which the term "assistant" is used as a subterfuge to obtain a part of the fee which otherwise could not be rightfully claimed.

It is interesting to note the reasons given for this secret fee-splitting as justification in the statistics which form the basis of this report. One of the commonest reasons is that it is justifiable because of the disproportionate fee between the amount paid the sur-

geon and the amount paid the physician who has made the diagnosis and referred the patient to the surgeon. This is the basis that a wrong has been done the physician because his services are not as well paid as the surgeon's. But two wrongs never yet made a right and the further wrongdoing of taking a patient to a surgeon because he will split the fee the most generously does not remedy or make up an injustice, however great, to the physician. The physician's remedy is along other lines, not one of dishonesty to his patient in which he betrays him according to the size of the fee obtained. Another reason given is that it is nobody's business what a surgeon does with his fee after he has earned it. But it is the patient's business to know for what he is paying, whether he is paying for the best work obtainable from the best man to perform that work or whether he is paying an inferior man to consummate a dishonest bargain with his physician, and the patient has a legal and moral right to know which he obtains. If there were no other reason for the unqualified condemnation of secret division of fees, this last conclusion would be quite sufficient. It puts a premium on graft and cupidity at the expense of the patient's life itself and stamps it as at once the subtlest and the grossest form of graft. It puts a premium on incompetency, for no man of high training and capabilities ever needs to resort to such base subterfuge to secure and maintain a lucrative practice. It is a form of competition that no honest man can meet, because there is no plane of honor on which such methods can be met.

But when we take into account the competition amongst surgeons for opportunities to work and the great desire to increase their clientele and income, it is easy to understand how they have stifled their consciences and have yielded to the temptation to bid for the work of their wavering confreres. Ex-

cuses are easily thought of and easily made. The lower morals and the lower standards of the average commercialism which they see around them are easily copied. The younger surgeon desiring to start will make his bids to split his fees and will gain a larger clientele and become more quickly established. Physicians unable to collect their fees will endeavor to throw the responsibility on the surgeon and obtain through him as a partial collector from their clients the moneys which they should collect for themselves directly from their patients. The result is demoralizing to them both. The patient is brought to the surgeon who will divide with the physician the greatest percentage of his fee irrespective of whether or not that surgeon is the best one to perform that operation on that given patient. Furthermore, the temptation soon arises to operate unnecessarily that the surgeon may have his fee and that the physician may obtain his share. From what at first seems but a harmless endeavor to collect part of uncollectable moneys due him for his work, the physician may find himself in the unhappy position of **having** degenerated into one who dishonestly is exploiting his patient for an unnecessary operation that he may share the proceeds of a dishonorable act. The surgeon who aids and abets in these practices or who trusts to the size of his bid to increase his surgery has demeaned himself and has equally degenerated from an honorable to a dishonest man."

This voluminous report, of which the foregoing is but a brief abstract, concludes with this resolution which was unanimously concurred in by the House of Delegates: "Resolved, that any member of the American Medical Association found guilty of secret fee-splitting or of giving or receiving commissions shall cease to be a member of the American Medical Association."

Various solutions for this problem

have from time to time been offered. None of them has the slightest ethical standing which does not contemplate the frankest knowledge by the patient of the entire financial transaction. He must know his physician's fee for his services and pay him; he must know his surgeon's fee for his services and pay him; and he should pay each directly without the intervention of either in the collection of the account. This rule may not be in strict accordance with our conception of an older ethics, but it is in accord with a newer and saner ethics which places all parties in interest above the suggestion of indirection or dishonor.

There has been much debate on the disparity between the compensation received by the physician for the pre-operative services rendered his patient and that which the surgeon receives for the operation which follows. How may this be equitably adjusted?

If the patient's malady is an acutely emergent one and his physician has made a diagnosis of life-saving importance, his compensation should be commensurate with that of the surgeon whose skillful operation completes the work of vital aid necessary to save the patient's life; and I think it is the duty of the surgeon to fully explain to the patient his obligation to his physician.

In other cases it is a gratuitous assumption perhaps to attempt a relative estimate. Every physician should know the value of his services to his patient and the ability of his patient to meet the obligation. He should kindly explain to the surgeon also the financial ability of his patient, and no surgeon of fine ethical sense will ever fail to adjust his fee to what, in the judgment of the physician and patient, the latter is comfortably able to pay.

Were we inspired by such motives, there could no longer be the humiliating spectacle of a physician sending his patient to the surgeon who secretly

paid him the largest percentage of the fee collected, for such favor, regardless of his training, experience and ability to operate with the greatest skill and safety.

There would not be the injustice imposed on the patient of almost double the legitimate charge for his operation because two surgical fees had to be paid out of that charge.

There would not be denied to the patient his own choice of a surgeon to whom he would entrust his life, because forsooth that surgeon could not be

made to sell his birthright for a mess of pottage.

After all, this whole matter would resolve itself into a very simple problem if the ethical relation between the physician, patient and surgeon could be one of just and kindly regard for the interests of all. There is no higher ethics than the golden rule. And we should strive to cultivate such a kindly consideration for each other's rights that we will at all times and under all circumstances be impelled to deal gently and justly with our patient and our professional brother.

THE MENOPAUSE, AND SOME OF ITS DANGERS.

BY F. W. THOMAS, M.D., CLAREMONT, CAL.

Some one has said that the menopause is the autumn time of woman's life. Her spring and summer time have gone by; as in the plant when flower and seed-time have passed, she is entering on that which precedes the "fall" that ushers in the frosty, but kindly, winter of old age.

The interference with, and the cessation of, her monthly ovum-laying, which has occurred for some 30 or 35 years, affects profoundly, more in some, less in others, the entire fabric, mental and physical, of her being. Nature is kind to the majority, and imperceptibly leads up to the impending stoppage and prepares the system for the change, so that they pass through it with comparatively little trouble. To them the harder experiences of the less fortunate of their sex are unknown. To some of the latter, however, it is in the widest sense, a true "change of life."

The climacteric is a physiological epoch in the life of woman when, fruition completed, with still a long period of active physical life before her, the bodily organism must undergo a readjustment. The organs of reproduction

being no longer required, a new distribution must be found for the considerable flow of blood and nerve force that formerly passed to this important region.

In his book on "Diseases of Women," Howard Kelly refers with emphasis to the variety of discomforts to which a woman is subject at the menopause, such as palpitation of the heart, flushes and confusion of ideas, leading often to neurasthenic tendencies, and occasionally to temporary insanity. Reflex symptoms, headache, nausea and a variety of other disturbances are often present, and within moderate limits, need not be regarded as of great consequence; but if present in a marked degree they are usually the expression of an over-taxed nervous system, or some organic disturbance that demands relief.

Cessation of menstruation before the age of 40 is regarded as abnormal, and is usually the result of some serious illness, or profound nervous disturbance, or the uterus has undergone superinvolution after the childbirth; or the uterus and ovaries may both be imperfectly developed.

*Read before the California Medical Society.

The occurrence of periodic bleeding after the age of 52 should be regarded with suspicion, as it usually is the manifestation of either a fibroid tumor or a cancer of the uterus, and requires investigation.

Fibroids of the uterus may become a source of danger from atrophy, septic infection, or degeneration. General diseases that occur at the time of the menopause frequently have reference to the nervous system, such as hysteria, neuralgia, hypochondria, neurasthenia, melancholy and insanity, but marked disturbances of the circulatory, the digestive, or the genito-urinary system may be present.

Whatever view may be taken of the nature of the menstrual molimen, and the physiological phenomena which anticipate and accompany the appearance of the flow, one fact is clear, menstruation in its first advent in the girl, and its cessation in the woman of advanced life, has a pronounced influence, both physical and psychological, on the female organism.

The close connection between ovulation and menstruation, even if we accept in part the view that they are not necessarily interdependent is sufficient to explain why the cessation of the menstrual function should seriously affect the general health of the woman. With a rhythmic regularity, important generative and metabolic processes, in which the ovaries and uterus mutually participate, are associated with nervous and circulatory disturbances which are continuous throughout the entire period of sexual activity in the life of woman. By the gradual decline or sudden cessation of these reproductive processes the whole system is necessarily affected. During this period the wave cycle, so to speak, of action and reactions, lasting from 30 to 35 years of life, bring regular alterations in functional activity, as shown in the temperature, respirations, blood-pressure

and heart action, which are associated with variations in general and local metabolism.

There can be no doubt that menstruation and ovulation are intimately connected, and that they do synchronize more or less as a rule.

When the climacteric is established, the production of the ova ceases. The theory is generally accepted, that there is a second function of the ovary besides the production of the ova which exercises a profound influence on the general economy of the body, and this function also ceases at the menopause. This function is similar to that of the other ductless glands, and it is supposed that there is some internal secretions from the ovary that is responsible for the general development of the sexual characteristics of the female, and for her general well-being.

According to Fraenkel, who is a great student of this subject, the corpus luteum of pregnancy is to be looked upon as a ductless gland, and that the ovary secretes two distinct internal secretions, one having effect upon the nutrition of the embryo, and the other upon the general changes of the body. He feels very firmly that a close inter-relationship exists between the various ductless glands themselves, and their connection with the sexual organs, and that it is definitely established in the adrenal cortex and pituitary hypophysis.

The balance between the various ductless glands is mysterious and complicated, and when one gland of the group is suddenly thrown out of action, as happens with the ovary at the menopause, it is hardly surprising if that balance is disturbed.

Many functional disturbances appearing during the active middle life of woman, pass off after the menopause, the system readjusts itself to the next stage of life, and in many instances better health is enjoyed than during the immediately preceding years. In

this respect, questions of heredity, individuality, and environment, all play important parts. In the journals we sometimes see references to "The Hemorrhagic Menopause Uterus," which applies to that type of disturbance at the climacteric which, without the usual pathological factors that superinduce hemorrhage, is characterized by profuse metorrhagia, frequently with serious results. In glancing over the literature on this subject, we find no uniform recognition of this trouble as a pathologic entity. Some speak of it as a local arteriosclerosis, others as an atrophic endometritis producing a hemorrhage through the loss of support to the vessels.

It is difficult to estimate the approximate percentage of women passing through this period who are thus afflicted, for only a certain number who dread the consequences of the hemorrhage, or who suffer from other symptoms of disease incident to this time, ever consult a physician. It is usually the excessive loss of blood that calls for medical aid. It is to be remembered also that somewhere between the 40th and 50th year the entire sexual apparatus of woman undergoes a certain amount of atrophy, associated with loss of the child bearing functions. The reason for this seems to be the disappearance of the Graffian follicles from the ovary, leaving these organs barren, after the menopause.

The notion prevails in the minds of some women that it is natural for them to flow excessively at the climacteric period, and many a malignant degeneration is allowed to progress to a point of extremely doubtful, or impossible cure for lack of proper investigation.

During the last few years there has been sounded an alarm, warning women with these hemorrhages that there is great danger of cancer of the uterus at such a time.

The extremes of woman's life, puberty and the menopause, have more or less mystery about them in connection with the excessive hemorrhage that sometimes occurs at those periods when menstruation is apt to be irregular and unusual, in duration and quantity.

It would seem as if those very general metabolic changes which lead to the commencement of menstruation, and its cessation, are regularly arranged for by the economy. We do not quite know yet what it is which positively leads to menstruation. Many research workers on this subject believe that it is nothing peculiar to the generative organs themselves, but that it is an expression of the general bodily metabolism showing itself in girls at that time when they should become ready to fulfill the functions of generation. It is now thought that this function is largely under the control of the ductless glands. Taking the four which are well known, on the one hand—the ovary and the thyroid producing an internal secretion which is a vasodilator, and on the other hand the suprarenal and pituitary, producing a secretion which is a vaso-constrictor—it seems probable, though by no means proved, that the inter-connection of these four secretions from ductless glands, makes for the harmonious working of the economy in general; and menstruation as an expression of the harmonious working of the economy, depends largely on the **proper balance** being maintained between these two groups of ductless glands. There may be other glands involved, but their nature is not so well understood as the four mentioned. Possibly excessive or irregular hemorrhage at the menopause may be in the absence of fibroids or cancer, due to disturbance of the ductless glands throwing out of balance general metabolism. Climacteric symptoms sometimes very strikingly resemble those of hyperthyroidism, showing a re-

lationship between the ovary and the thyroid gland.

It is well known that the thyroid develops very largely at puberty and also enlarges during pregnancy, and that it may have some influence on menstruation at its onset, is more than probable. Just how it has this influence is not quite certain, but recent researches, especially those by Blair Bell of Liverpool, tend to show that menstruation depends very largely upon the calcium metabolism of the body; that for the menstrual function to be properly carried out there must be a due proportion of calcium in the blood. It has been shown also in this connection that at those times when there is a large necessity for calcium metabolism in other directions, as during lactation, menstruation is in abeyance. Investigation shows that the menstrual flow itself contains a far larger proportion of calcium salts than the general circulating blood. These two facts at all events point to some profound influence of the calcium metabolism of the body upon the menstrual function. This being so, it is not unreasonable for us to conclude that irregular, profuse hemorrhage, both at the onset of menstruation and at the menopause, may be dependent upon some deficiency in the calcium content of the blood.

An important clinical feature to bear in mind is, that cancer of the body of the uterus produces an almost constant or daily blood-stained discharge, while a hemorrhage not dependent upon the presence of a growth will occur at irregular intervals of four, six, or eight weeks, or even longer periods.

Fibrosis is responsible for some of the worst hemorrhages that occur at the menopause, concerning which there has been great mystery in the past. The exact nature of fibrosis uteri is not yet settled, but the majority of investigators conclude that it is septic in origin, due to infection from a septic labor

or abortion, or to an attack of gonorrhoea. The disease practically always occurs in married women from 35 to 50 years of age who have borne children.

It is a generally known fact that in menstruating women the blood-pressure increases before the flow, and diminishes after. Consequently, at the climacteric, when the monthly loss ceases, the many subjective symptoms of that condition disappear, and there is a tendency to permanent increase of blood-pressure in some women who become more fleshy and plethoric, after the menopause.

It is also well known that various forms of mental diseases may appear at the climacteric, and women who have safely passed through puerperal periods, may mentally break down at the menopause. Melancholia is most common, but cyclic conditions are not unknown. It is an interesting question whether or not the increased blood-pressure at such times may not contribute to the cause of the disturbed mental condition; if so, there should be appropriate steps taken to lower the pressure, instead of giving tonics as is frequently done under such circumstances.

The complexity of the symptoms which appear to have their origin in the nervous system during the menopause is in part due to the special hypersensitiveness of the woman, and her susceptibility during this time to various neuroses. There may be mild psychoses, obsessions, and hypochondria, or delusions, melancholia, hysteria and insanity.

Sometimes important questions of a legal or sociological nature arise, the answer to which involves the question of the mental balance and responsibility of a woman who is suffering from menstrual irregularity of the menopause. Sufficient evidence has been adduced to prove that during the ordinary menstrual epoch there is in some women either an exaltation with ex-

citation of the mental functions, or, on the other hand a corresponding lowering and depression of these. There can be no doubt that some women manifest these conditions of excitations and depressions during the menstrual period who at other times are in every respect normal in their acts and social relationships. When the climacteric approaches, these mental effects are naturally aggravated; hence in the investigation of any unusual or criminal act committed during this time, an important element in fixing responsibility must be, the antecedent mental condition of the woman. If acts inconsistent with her established character and attitudes to friends and relatives out of harmony with her previous relationships have been observed and noted, then such facts would go far to justify a belief that she was not responsible in whole or in part.

The minor psychoses and neuroses occurring at the climacteric period, are almost always recovered from, and in them as in others, the time element is an important factor in treatment. Even in the mildest types there are some depressions, many ill-defined nervous symptoms, and unstable emotional states.

In this connection it is well enough to remember that men sometimes pass through a state or period that is recognized as similar in character to the climacteric in women. The reproductive function plays a smaller part in a man's life at such a time, for there is nothing to compare with the almost sudden change of the organs of reproduction which marks the middle age of woman. The grand climacteric in man is later than in woman. It varies more in the individual, is not accompanied by such definite symptoms, and marks more the beginning of the period of senile decay than the period of cessation of the reproductive function.

So far as the treatment is concerned

during the menopause, the individual case will govern the course. Looking broadly at the general management, the prominent and primary indication is to enforce first principles so far as possible in the regulation of the various functions of the body, and to encourage a good healthful occupation, either mental or physical. A woman needs sympathy, encouragement and instruction, at this important period in life when her highly organized and mysteriously complicated nervous system is put to the severe test. Nature endowed her with functions higher than those allotted to man. She develops, nourishes, and gives birth to the offspring. Surely it is a kind providence that relieves her of these burdens in the latter years of life.

Women should be properly instructed concerning the nature of the menopause, so that they may not be unduly anxious about its approach, nor indifferent to its effects, to the extent of attributing all of their ailments at that period to the change of life. It frequently happens that other and more serious troubles arise at this time that demand attention the same as at any other period of life, and investigation should not be neglected lest serious consequences follow, that might have been averted.

In conclusion, mention should be made of the artificial menopause which is brought about by the removal of the ovaries. Such removals in a large number of women have but a slight effect, lasting only for a few months after the operation. It is generally shown in the milder manifestations of the normal menopause, more generally in the various vaso-motor disturbances usually present at the latter time, such as nervous irritability, despondency, heat flushes, etc. The important question, not yet satisfactorily settled, as to how far the preservation of a portion of the uterus, as the cervix in hysterectomy,

contributes to mitigation of the nervous symptoms that the operation induces. The weight of evidence would tend to prove that if an ovary or part of an ovary is left, the sacrifice of the entire uterus is more prejudicial to the woman and more likely to be followed by unpleasant consequences than when a portion of it is left.

The trend of recent thought lies in the direction of regarding the uterus and ovaries as having equally important co-relations in their influence on menstruation and fecundity, as also on the general metabulation.

SEX INSTRUCTION.

The News may be a little old fashioned, but somehow or other it cannot lend itself to the opinion that the welfare of innocent girls is advanced or their virtue protected by taking them on a trip through the red-light district and showing them its sickening horrors. Yet this idea, exploited for profit by the producers of sensational plays and the writers of neurotic stories, seems to have taken hold of the public, and as a consequence the tendency today is to immerse innocence in filth in order to keep it clean. It matters not to the News whether this fad has the sanction of all the Ella Flagg Youngs and Jane Addamses in the world, the idea is repellent and is grounded in error. The fact of the matter is that the great bulk of this talk of young girls growing up without the least idea of certain vital facts which they should know, is rank foolishness. There is not one girl in ten thousand who reaches the age of puberty without learning all that is necessary for a good girl to know, and she does not have to be dragged through a sewer to find it out, either. The girl who goes wrong usually does so because she is placed in circumstances where advances by the designing men are made comparatively easy, and no better paving for the road to hell is

afforded than a common knowledge of evil and the privilege of discussing it which are afforded by the drama and the literature of our day. They break the ice of that conventionality which has been so powerful a safeguard for innocence.

Of course, parents should, and in the vast majority of cases do, give their children certain needed and necessary instruction, but they do not have to sit down with manikins of the male and female and enter into elaborate discussions of physiology in its relation to sex hygiene, the details of the white-slave traffic, and the way of a man with a maid. Some things are taught more wholesomely by a few plain words between parent and child than by specially arranged courses of instruction.

Virtue is not half so blind as certain crusaders would have us believe, and the News ventures the very respectful assertion that there is not one of them who can recall a single instance of a maiden so thoroughly guileless as to caper into a young man's bedchamber in her nightgown and see nothing of impropriety in the act. Virtue and modesty are twin sisters and their promptings are instinctive. Let a visiting man in any home come on an eight-year-old girl of the household in her night-dress and she will scamper for cover like a startled quail. Yet such a child is as innocent of sex knowledge as she was the day she was born. We are being asked to stand for a good deal these days in the way of "modernism," "progressive thought" and "advanced ideas," and the votaries of the new thought put forward such amazing propositions in such startling profusion and with such remarkable rapidity that we sometimes wonder if after all much of it is not the bid of those who seek notoriety and of those even more objectionable creatures who pander for profit to the public's love of novelty and change.—Fort Wayne News.

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EDITORIAL

MEDICAL BUILDING STING.

Possibly some of the members of the profession will remember being practically coerced into buying stock for a "Medical Building" in Los Angeles. In this connection, we have just received the following communication, addressed to a member of the profession in this city:

July 1st, 1914.

Dear Sir:—

On November 20, 1912, the Medical Building Corporation became indebted to the Los Angeles Trust & Savings Bank of this city in the sum of \$35,000.00. At the present time there remains unpaid on said note, the sum of \$27,472.50. This obligation has been assigned to Gail Wehrle, for the purpose of collecting the same against the stockholders on their stockholders' liability, as provided by Section 322 of the Civil Code of California. The amount owing by you on account of this obligation is the sum of \$—. Unless the same is paid immediately, an action will be commenced to collect the same.

Very truly yours,

HICKCOX & CRENSHAW,

Per L. O. Crenshaw.

How interesting! There are a few things we would like to know before drawing our check. Incidentally, our attorney tells us that it will not be necessary to draw a check, notwithstanding this demand to pay "immediately." We never did like to be pushed, you know. If there are any other physicians who have received a similar notice, we would like to hear from them.

SNAKE BITES AND POISON OAK.

Health Commissioner Powers in his monthly Bulletin for May has some valuable advice to summer campers:

Artificially fed babies should not be taken where canned milks or other unsatisfactory foods would need to substitute the ordinary diet. For traveling we should provide our own drinking cups and towels and in many cases vaccinate our children before starting, especially if one visits the popular resorts.

We should also provide a medical and surgical kit against snake bites, poison oak, sunburns, the ordinary accidents and the ordinary ills incident to

changes of food and conditions of living.

For snake bites one should carry a small bottle of permanganate of potash (crystals). This bite can then be slit open in the form of a cross and the pure crystals packed tightly into the cut. Or a strong solution may be made with water and injected around the bite by a hypodermic syringe.

Strychnine sulphate tablets 1-30 grain every three hours should be used to combat depression of the heart. Aromatic spirits of ammonia in half teaspoonful doses in water may be used as often as needed to combat sinking spells. As a rule systematic treatment may be stopped after thirty-six hours.

For poison oak a mixture of black-wash and lime water (half and half) may be applied on linen cloths, and after the acute inflammation subsides apply zinc oxide ointment.

For sunburn, calamine lotion applied on linen cloths is good or the black-wash and lime water mixture mentioned above. As a preventive, a thick coating of cold cream dusted over with calamine powder serves the purpose.

Always remember that gunshot wounds are very liable to cause tetanus (lockjaw).

A NEW DEPARTURE IN MEDICAL EDUCATION IN LOS ANGELES.

A matter which should be of considerable interest to the medical profession of Southern California is the action which was taken by the Board of Regents of the State University of California in deciding to make the Los Angeles Medical Department of the State University a school for graduates of medicine.

Heretofore the work of the Los Angeles Medical Department of the University of California has been that of undergraduate instruction, the Department giving the third and fourth year medical work, the students taking the

work of the first and second years at Berkeley, or at some other accredited medical school having the collegiate standard of admission.

The faculty of the Los Angeles Medical Department has felt that it would be unwise in an economical sense, at this time at any rate, to duplicate the third and fourth year work at San Francisco and at Los Angeles, and therefore the Los Angeles faculty recommended to the Board of Regents at the State University, that the undergraduate instruction be discontinued, and that the splendid dispensary and clinical facilities at Los Angeles be used for a "School for Graduates of Medicine."

With the many recent improvements in the buildings of the Los Angeles Medical Department, and the increased facilities for good work, it would seem that the step which was taken by the Regents, by recommendation of the Los Angeles faculty, was a very wise one.

Certainly a school for graduates of medicine conducted upon broad and high standard lines, should find a field for efficient work, and should be the means of drawing to Los Angeles a very considerable number of men who wish to give themselves the opportunity of increased clinical experience, practice and skill, and who would prefer to do this in a climate such as that which Southern California can offer.

With the close of the scholastic year of 1913-1914 in June, Dr. W. Jarvis Barlow, who has been Dean of the institution for the last few years, gave up that office by sending in his resignation, and the Regents have appointed as Dean in his stead, Dr. George H. Kress.

The "Practitioner" is much interested in this new departure in medical education in Los Angeles, and hopes to see the work eminently successful, and bespeaks to the institution the good will of the profession of the South.

EDITORIAL NOTES

Dr. Francis A. Seymour has removed his offices to the Bradbury Building.

The Pomona Valley Hospital Training School for Nurses conferred diplomas on four graduates on June 23rd.

Dr. Frank W. Miller has removed his offices to Suite 1020 Merchants National Bank Building, 6th and Spring streets, Los Angeles.

WANTED—Position as "locum tenens" in Los Angeles. References given and requested. Kenneth W. Allen, M.D. San Fernando Bldg.

WANTED—Resident physician for a tuberculosis sanitarium. Apply to Dr. Henry B. Stehman, 70 South Grand avenue, Pasadena, California.

WANTED—Physician's office examining table, optical trial lens case. Address H. G., Apt. 25, Strathmore Apts., 9th and Grand View, Los Angeles.

Management of Fractured Charcot Hip Joint and Treatment of Fractures of the Patella are reprints of papers by Dr. Rexwald Brown of Santa Barbara.

At its annual convocation, June 3, 1914, the Hamilton College of Law of Chicago, conferred upon Dr. G. Frank Lydston the degree of Doctor of Civil Law.

Drs. M. L. Moore, E. C. Moore, Percy White and their associates have taken 1007 to 1019 Merchants National Bank Building, 6th and Spring streets, for their offices.

Dr. W. T. McArthur of Los Angeles attended the Surgical Congress in London and is spending a few weeks in the clinics of Paris and Vienna. Mrs. McArthur accompanies the doctor.

Dr. F. S. Dillingham of Los Angeles was very ill for several weeks, but is now in excellent health. Drs. Dillingham and MacGowan have dissolved

partnership and he now has his offices in 612-14 Lissner Building.

Dr. A. C. Rogers of Los Angeles, who is taking his vacation in Brookfield, N. Y., about an hour's ride from Utica, writes "we are located in a bungalow with our kindred on every hand and we go fishing almost every day."

TO RENT—Temporarily—From Sept. 1 to Dec. 31, 1914., suite of offices in Baker-Detwiler Bldg., in association with established physician. Telephone or write L. A. County Medical Assoc. Telephone Exchange, Bradbury Bldg., Los Angeles.

A postal from Rome showing a great crowd and a lion in the Coliseum comes to us with a note from Dr. H. G. Brainerd who says: "We were only 1900 years too late to see the show. That is the way one has to do with many of the sights in Rome."

Dr. Frank Garcelon, age 66 years, died at his residence June 23rd. The body was cremated, and funeral services were held June 25th in the family home, Pomona, where he had lived for 26 years. Dr. Garcelon was widely known and most highly esteemed.

FOR SALE—A Van Houten & Ten Broeck Static machine, twelve plate, in first class condition, motor and starting box; also high frequency attachment giving Tesla, Oudin, etc. All together or separately at a bargain. J. E. Seeley, 239 S. Los Angeles St. F4163.

A Los Angeles doctor who started in practice eight years ago with only \$5 is now worth \$10,000. His accumulation of this considerable sum is due to his frugality, good habits, strict attention to his professional work and the fact that an uncle died and left him \$9,990.

The Emergency and General Hospital (Crocker St.) Training School for

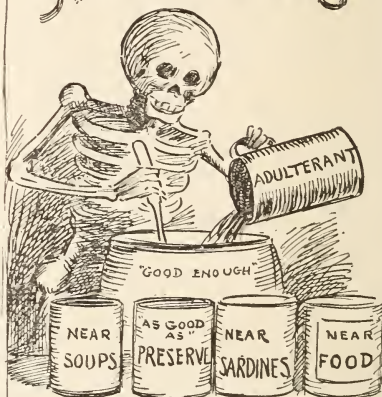
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SICKNESS



DELICATELY
ADULTERATED
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HIGHLY
CONTAMINATED
— **FOOD** —
CHEAPER THAN
THE OTHER KIND

AMERICAN MEDICAL ASSOCIATION CARTOON SERIES

AT WHICH SHOP?

Nurses held its graduating exercises on the evening of the 12th of June at the Ebell Club House. Miss Mildred Nichols, the superintendent of nurses, conferred the diploma of the school on fourteen young women.

Dr. C. G. Stivers assisted by his talented daughter, who is a graduate of the College of Oratory of the University of Southern California, is prepared to treat and care for cases of speech defects, stammering, lisping apponia, etc., at his studio, 1115 Arapahoe St., Los Angeles. Summer classes for school children.

Dr. Ross Moore of Los Angeles is spending a few months abroad. He will attend the International Conference of Neurology and Psychiatry in Berne and will also spend much time in the institutions of Paris and Vienna. Mrs. Moore accompanies the doctor and they will motor between the various centers.

Dr. Harold W. Wright of Santa Barbara has been delivering a series of lectures on nervous and mental diseases. The Problem of the Criminal in the Light of Some Modern Conceptions is a reprint also by Dr. Wright, who was assistant alienist Bellevue Hospital, New York, before he came to Santa Barbara.

The Los Angeles Examiner says: Dr. C. W. Cook of 316 South Normandie avenue and Miss Carrie Stallard were quietly married Saturday evening June 27th, by Rev. D. F. Howe, pastor of the Westlake Methodist Episcopal Church. Dr. Cook met Miss Stallard at the Angelus Hospital. Later she was stricken with appendicitis and was operated on by Dr. Cook and nursed back to health.

The Medical Symposium Society, a flourishing scientific society composed of fifty of the younger members of the medical profession of Los Angeles, held

its annual meeting at the Jonathan Club June 30th. Dr. Van Noorden, Jr., of Vienna, was the guest of honor. The annual election resulted as follows: Dr. E. H. Wiley, president; Dr. John C. Ferbert, vice-president; Dr. Michael Cresmer, secretary-treasurer.

Dr. George Frederick Reinhardt, age 45, graduate University California 1900, died June 7, in the infirmary of the University of California from an infection of the lungs, resulting from a carbuncle. The deceased was a genial, forceful member of the profession. He leaves a widow and a young son. We last saw him, the picture of health, about a year ago, when he showed us with evident pride the photograph of his robust, laughing boy.

The annual banquet given to the graduating class by the faculty and Alumni of the College of Physicians and Surgeons, of the University of Southern California, was held at the Hotel Virginia, on the 11th of June. There were present over one hundred members of the faculty, graduates and undergraduates of the college. An elaborate menu was provided, accompanied by a suitable musical programme. After dinner speeches were made by Dr. C. W. Bryson. Dr. James H. Seymour, Dr. Fitch C. E. Mattison, Dr. Frank C. Bishop, Dr. Anders Peterson and Dr. John J. Kyle. At the close of the speech-making the company adjourned to the ballroom, where dancing was enjoyed until midnight.

Dr. A. B. Cooke in a recent paper before the Los Angeles County Medical Association says:

The four cardinal principles of anoci-association are:

1. The preliminary administration of a hypodermic of morphin and scopolamin.
2. The use of nitrous oxid and oxygen for general anesthesia.

3. The complete blocking off of the operative area by the infiltration of a solution of novocain.

4. The infiltration of all tissues traumatized which are supplied with sensory end-organs (except the skin) with a solution of quinin and urea hydrochlorid.

To these I would add a fifth, referring especially to the prevention of gas pains following abdominal operations, namely, early opening of the bowels.

1. The preliminary hypodermic of morphin and scopolamin is designed to allay apprehension and tranquillize the patient. . . .

2. It is universally conceded that, in competent hands, nitrous oxid is preferable to ether for general anesthesia, even in face of the fact that it possesses certain inherent disadvantages.

3. Combine local with general anesthesia. Novocain in 0.25 per cent. solution is the agent employed. First the skin in the line of the proposed incision is carefully infiltrated and then the subjacent tissues step by step as they are encountered. The application of pressure renders the anesthetic effect practically instantaneous. When the abdominal cavity is to be opened the peritoneum should first be thoroughly infiltrated in the line of the incision and the edges everted and blocked off for an inch on either side to protect it in the further manipulations.

4. The anesthetic effect of quinin and urea hydrochlorid is maintained for from forty-eight to seventy-two hours; that of novocain is quite transient. This in brief is the explanation of the fourth principle of anoci-association. Before closing the wound all stumps containing sensory nerves are infiltrated with a 0.25 to 0.5 per cent. solution of the quinin salt and the several tissues of the wound itself similarly treated as was the case with the novocain solution in making the incision. By this means the parts are held anesthetic until the

process of repair is established and the patient escapes much of the customary postoperative discomfort.

5. It has been my regular plan to begin the administration of calomel in powder form, usually combined with cerium oxalate, twenty-four to thirty-six hours following the operation, giving a half grain of the former and one grain of the latter at a dose every hour until six doses are taken. Four to six hours after the last dose, or sooner if indicated, a purgative enema is given which generally inaugurates active peristalsis.

CRAMPS OF CHOLERA MORBUS.

The approaching season of heat, with its following train of stomach and intestinal diseases, emphasizes the proven value of Hayden's Viburnum Compound in cramps of cholera morbus and muscular cramps.

H. V. C. is compounded only from selected material, depending for its therapeutic efficiency upon the recognized value of Viburnum Opulus and Dioscorea Villosa, combined with Aromatics.

Dr. Torald Sollman in his text book "Pharmacology," page 510, recommends Viburnum Opulus in muscular cramps.

"King's American Dispensary," page 2059, Vol. 2, refers to this same product in like conditions.

Prof. Potter in his "Materia Medica, Pharmacy and Therapeutics," page 266, recommends the employment of Dioscorea Villosa in cramps of cholera morbus, and Prof. Ellingwood in his text on "Materia Medica and Therapeutics," page 336, also advises its employment.

Hayden's Viburnum Compound presents Viburnum Opulus and Dioscorea Villosa in their most refined and active state and when given in hot water, a pronounced effect will be observed when employed in cramps of cholera morbus and in muscular cramps.



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES

IT IS INFINITELY MORE HUMANE, THAT A FEW ANIMALS DIE IN
SCIENTIFIC RESEARCH, WITH LITTLE OR NO PAIN, THAN THAT
THOUSANDS OF LITTLE CHILDREN SHOULD LIE ON BEDS
OF PAIN AND PERHAPS AT LAST, DIE IN AGONY.

BOOK REVIEWS

DISEASES OF THE RECTUM AND ANUS. Edited by A. B. Cooke, A.M., M.D., of Los Angeles, formerly Lecturer on Diseases of the Rectum and Professor of Anatomy in the Medical Department, University of Nashville; formerly Professor of Anatomy and Clinical Proctology, Medical Department, Vanderbilt University; Fellow of the American Medical Association; Fellow and sometime President of the American Proctologic Society, etc. Assisted by Wm. M. Beach, A.M., M.D., Pittsburgh, Pa.; J. Coles Brick, M.D., Philadelphia, Pa.; George B. Evans, A.M., M.D., Dayton, O.; Alois B. Graham, A. M., M.D., Indianapolis, Ind.; Granville S. Hanes, M.D., Louisville, Ky.; Louis J. Krouse, M.D., Cincinnati, O.; Collier F. Martin, M.D., Philadelphia, Pa.; Frank C. Yeomans, A.B., M.D., New York City, and A. J. Zobel, M.D., San Francisco. With 215 illustrations in the text and 21 full-page plates, 7 in colors. F. A. Davis Company, Publishers, Philadelphia and London, 1914. Price \$5.50 net.

The first sixteen chapters are by Dr. Cooke, and the following chapters are all properly accredited to those who wrote them and who are responsible for them. It is by far the best recent work on the subject that has come before us for review, and we congratulate the profession of Los Angeles upon the accession to our ranks of the author. The illustrations in this volume are quite modern and excellent. Reproductions of radiographs have been judiciously used. Within 619 pages, it contains a vast fund of information on the subject, so arranged that it appeals to the man in general practice.

Discussing the non-operative treatment of anal fissure, which the author recommends in suitable cases, many valuable suggestions are offered. A soluble condition of the bowels should be maintained. In recent cases, cleanliness, a mild antiseptic wash and the application of a dusting powder, e. g., aristol, calomel, from day to day may be all that is required. When the lesion is particularly sensitive, orthoform, alone or in combination, is useful. In long standing cases stimulating and occasionally even caustic applications will be required. Ichthyol (pure),

carbolic acid (pure), balsam of Peru (10 to 20% in castor oil), argyrol (10 to 20% solution), and nitrate of silver (5 to 20% solution or stronger) are the most useful agents of this class.

It is a good modern work on a practical subject.

CLINICAL HEMATOLOGY: AN INTRODUCTION TO THE CLINICAL STUDY OF THE SO-CALLED BLOOD DISEASES AND OF ALLIED DISORDERS. By Gordon R. Ward, M.D. Fellow of the Royal Society of Medicine, Medical Society of London, etc. Octavo of 394 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.50 net.

This volume is of especial value to the practitioner, inasmuch as it deals largely with the clinical study of the so-called blood diseases, rather than with any extensive pathological investigation of them. The illustrations are good, and of a much more practical character than is usually presented in works on this subject. Most of the morbid processes designated "blood diseases" are not in reality diseases of the blood but of the blood forming organs. It would seem more logical to classify them on this basis.

We note the following, regarding the blood in appendicitis:

Simple inflammation without the retention of pus or muco-pus in the lumen of the appendix does not lead to a leucocytosis. When the latter is present a diagnosis of pus formation is justified, but it gives no clue to the amount of pus. This must be decided by other means. A leucocytosis that is found to be increasing each day or is found to be over 20,000 when the case is first seen affords unequivocal indication for operative measures without delay. This holds good although the condition of the patient may appear exceptionally favorable. When an abscess has been drained the leucocytosis should disappear in the course of 36 hours at

most. If it still persists there is still pus without free outlet or else general peritonitis is present. In the same way the occurrence of later complications such as sub-diaphragmatic abscess can be detected at the earliest possible opportunity. It is necessary to exclude other inflammatory complications such as pneumonia.

BLOOD PRESSURE IN MEDICINE AND SURGERY. A GUIDE FOR STUDENTS AND PRACTITIONERS. By Edward H. Goodman, M.D., Associate in Medicine in the University of Pennsylvania. 12 mo., 226 pages, illustrated. Cloth, \$1.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

No physician is properly equipped today unless he understands blood pressure and carries with him an instrument for its measurement. It is quite as important as the thermometer and stethoscope. The subject has been thoroughly investigated in all its bearings by many of the foremost physiologists and clinicians.

A brief, clear and authoritative book has been needed to place this definite body of knowledge readily at command of the practitioner of medicine and surgery. Dr. Goodman has devoted years of study to the subject, and is qualified to present it in every particular. He covers the physics and physiology sufficiently to convey an understanding of the principles, and then devotes successive chapters to Hypertension and Hypotension; Blood Pressure in Cardiovascular, Renal, Infectious and Nervous Diseases. Chapters are also given on Blood Pressure in Obstetrics and in Surgery. Then the author deals with conditions in the Gastro-intestinal tract and the Internal Secretory Glands and in Ophthalmology. He closes with chapters on the Effect of Drugs and other Therapeutic Measures on Blood Pressure and on the treatment of Hypertension and Hypotension. His style is exceedingly simple, clear and direct, and he introduces many typical and instruct-

ive diagrams. As an authoritative compendium of the subject this handy volume accomplishes its purpose "to make fully available the assistance which the study of blood pressure affords in the diagnosis, prognosis and treatment of disease."

PRACTICAL PEDIATRICS. A modern clinical guide in the diseases of infants and children for the family physician. By James H. McKee, M.D., Professor of Pediatrics in the Medical Department of Temple University; Visiting Pediatrician to the Philadelphia General Hospital; Garretson Hospital; and Samaritan Hospital, Philadelphia, and to the Bancroft School for Mentally Deficient Children at Haddonfield, N. J., Formerly Professor of Pediatrics, in the Woman's Medical College of Philadelphia, etc., and William H. Wells, M.D., Assistant Professor of Obstetrics, Jefferson Medical College; Pediatrician to the Willings' Day Nursery; Assistant Obstetrician, Maternity Department, Jefferson Medical College; Fellow of the College of Physicians of Philadelphia; Formerly Adjunct Professor of Obstetrics and Diseases of Infants in the Philadelphia Polyclinic and College for Graduates in Medicine, etc., with an appendix upon Development and its Anomalies, by John Madison Taylor, A.M., M.D., Associate Professor of Non-pharmaceutical Therapeutics, Medical Department, Temple University, Philadelphia; Formerly Professor of Diseases of Children, Philadelphia Polyclinic and College for Graduates in Medicine; and of the Medico-Chirurgical College of Philadelphia; Fellow of the College of Physicians of Philadelphia; Corresponding Member of the Societe Hygienique de France; Consulting Physician to the Schools for Feeble Minded Children at Elwyn, Pa., and at Haddonfield, N. J., etc. With 2 colored plates and 146 illustrations, including 238 figures. In two volumes. P. Blakiston's Son & Company, 1012 Walnut Street, Philadelphia, Pa. Price: \$12.00 net. 1914.

We would commend this work to those needing an up-to-date comprehensive treatise on the diseases of children, which has been aptly termed "the specialty of the general practitioner." However, we cannot agree with all the dicta of the writers. Thus, among the reasons for failure in breast feeding is considered an insufficient supply that fails to satisfy the baby. "If, after several weeks or months of successful nursing, the mammary secretion becomes insufficient for the baby's needs, it is always to be borne in mind that

'a half loaf is better than none.' To the observant mother, the baby usually proclaims this difficulty eloquently. He probably nurses voraciously for a short period of time. Then, dropping the nipple from the mouth, he evidences his disappointment in loud crying. If he is weighed before and after the nursing, it is found that he secures a totally inadequate amount. The difficulty may be met in several ways: He may be permitted to nurse from one breast at a time and may then be fed a proper milk formula in sufficient amount to atone for the maternal deficit. Again, he may be fed from both breasts and be given a milk formula at his next feeding time.'" Under those circumstances, many women in this generation would suggest very forcibly another alternative, not mentioned by the writer. Indeed, the tendency of the day is toward artificial feeding under much less provocation than here depicted. Further along very good rules are given for the selection of a wet nurse. Why should not some such rules be followed in determining whether the mother is a proper wet nurse for the child? But we would criticise this excellent treatise only to commend it most heartily as a whole.

RADIUM AND RADIOTHERAPY. RADIUM, THORIUM AND OTHER RADIO-ACTIVE ELEMENTS IN MEDICINE AND SURGERY. By William S. Newcomet, M.D., Professor of Roentology and Radiology, Temple University, Medical Department; Physician to the American Oncologic Hospital; Fellow of the College of Physicians, Philadelphia. 12 mo., 315 pages, with 71 illustrations and 1 plate. Cloth, \$2.25, net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

The extraordinary element radium has been thoroughly investigated, and its powers and properties are now becoming known. Like other potent agents, it can do great good or great harm, according to the intelligence or ignorance with which it is used. Dr. Newcomet is a leading authority on radium, and the whole field of radio-active sub-

stances. In this small volume of absorbing interest he first conveys a knowledge of what radium actually is, its nature, its physics and its chemistry, and in the second half of his book he details its use in all the diseases in which it has been found of value, and gives full directions for its application. His chapters on cancer and other tumors will be read with special interest. Simple illustrations are used to make clear any point, and typical cases are introduced in proof of the practical value of this newest and most powerful addition to the armamentarium.

INFANT FEEDING. By Clifford G. Grulee, A.M., M.D., Assistant Professor of Pediatrics at Rush Medical College, Chief of Pediatric Staff, Cook County Hospital. Second Edition, Thoroughly Revised. Octavo of 314 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.00 net.

The first edition came out in 1912. In the present edition, the author has taken due cognizance of the scientific facts presented during the past two years, though during that time there has been nothing presented that would revolutionize our ideas on the subject of infant feeding. The volume is based on the course of lectures delivered at Rush.

The author is an advocate of the four hour interval between nursings. By allowing the breast to become full between nursings we promote a better action of the breast, and hence a greater supply of milk. By giving the food to the infant at longer intervals you give its stomach a rest and there is not the same danger of over-distention of the stomach. This method of feeding is often met with unexpected success. It is certainly true that in two hours the infant's stomach is not empty. To add food to a stomach which already contains partially digested food would seem, and is, injurious. The best hours for nursing are 2, 6 and 10 a.m., and 2, 6 and 10 p.m.

MISCELLANEOUS

UNITED STATES CIVIL SERVICE
EXAMINATION.

Expert on Sanitation, Male and Female
(\$2,800.)

August 10, 1914.

The United States Civil Service Commission announces an open competitive examination for expert on sanitation, for both men and women. From the register of eligibles resulting from this examination certification will be made to fill a vacancy in this position in the Children's Bureau Department of Labor, Washington, D. C., at a salary of \$2,800 a year, and vacancies as they may occur in positions requiring similar qualifications, unless it is found to be in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

The duties of the position will be to act as adviser of the Bureau in matters requiring knowledge of hygiene and in co-operation with other experts to conduct investigations into dangerous and injurious occupations, the social factors responsible for high infant mortality, and other matters involving health.

Competitors will not be assembled for examination, but will be rated on the following subjects, which will have the relative weights indicated.

Subjects.	Weights.
1. Education	40
2. Experience	40
3. Publications or thesis.....	20
—	
Total.....	100

Graduation from a medical school of recognized standing; and at least three years' specialization in the hygiene and diseases of childhood, or three years' experience in sanitary inspection work, are prerequisites for consideration for this position.

Under the third subject the applicant may submit publications on matters pertaining to hygiene or a thesis on some phase of child hygiene, or both.

Statements as to education and experience are accepted subject to verification.

Applicants must have reached their twenty-fifth but not their fiftieth birthday on the date of the examination.

Under an act of Congress applicants for this examination must have been actually domiciled in the State or Territory in which they reside for at least one year previous to the date of the examination.

This examination is open to all persons who are citizens of the United States and who meet the requirements.

Persons who meet the requirements and desire this examination should at once apply for Form 304, and special form, stating the title of the examination for which the forms are desired, to the United States Civil Service Commission, Washington, D. C.; the Secretary of the United States Civil Service Board, Post Office, Boston, Mass., Philadelphia, Pa.; Atlanta, Ga.; Cincinnati, Ohio; Chicago, Ill.; St. Paul, Minn.; Seattle, Wash.; San Francisco, Cal.; Customhouse, New York, N. Y.; New Orleans, La.; Honolulu, Hawaii; Old Customhouse, St. Louis, Mo.; or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R. No application will be accepted unless properly executed, excluding the medical certificate, and filed with the Commission at Washington, with the material required, prior to the hour of closing business on August 10, 1914. The exact title of the examination as given at the head of this announcement should be stated in the application form.

Issued July 1, 1914.

FEEBLEMINDEDNESS AND PHYSIOLOGIC PSYCHOLOGY.

In a paper in the Charlotte Medical Journal of August Dr. H. O. Hyatt of Kingston, N. C., discusses the anatomic relations of the nerve cells to each other and the physiologic conditions under which thought is evolved. According to Dr. Hyatt's deductions, the cell bodies of the neurons, of the general sense of feeling and of the special sense organs receive and register impressions carried to them from the outside. The records are more or less permanent and constitute the basis out of which thoughts are evolved, just as the alphabet constitutes the basis out of which words are constructed. Under the stimulus of an adequate blood supply the cell bodies of the associative areas of the brain mediate these records into thought. Thought being a product, must be made by something and out of something. Past educational environment on account of the records it has left on the recording cells determines the quality and diversity of the thought product of a given brain.

Heredity, according to Dr. Hyatt, influences anatomic structure only, similarity of brain structure enabling similar areas of brain cells to receive and associate similar outward impressions. Under like environment father and son would manifest similarity and thought. In this way and in this way only can genius be said to be hereditary. A father might transmit to his son identical brain structure. But if the environment under which the son is reared is radically different from the past environment of the father there could be no similarity in the thoughts of father and son because of the difference in their nerve cell records.

The nerve cells in the associated areas of the brain can mediate thought only when they are supplied with a sufficiency of blood, as they are during awakeness. During the anemia of sleep they are quiescent. Under the burden

Svapnia

**Purified Opium
With a Fixed
Morphine Standard**

SVAPNIA possesses the following advantages over ordinary opium:

Freedom from mechanical impurities; elimination of undesirable alkaloids; definite morphine content (10 per cent); lessened tendency to nausea and vomiting; increased palatability; uniform results.

The adult dose of Svapnia (1 to 2 gr.), as well as the indications for its use, are the same as opium. It is in the form of red-brown scales, soluble in water with turbidity, and is best administered in capsules, pills or powder form.

Sold by druggists generally.

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Sample and literature on application.

of certain toxic materials in the blood they are incapable of functioning.

During the draining of the cerebral blood vessels which occurs in going to sleep, and the filling of the same in the process of awakening, dreams occur which are semi-thoughts fashioned out of past records by the cells in the association areas that receive the first flush of blood on awakening or retain the last on the emptying.

Heredity influences tissue structure.

Education or environment determines thought.

FISSURES OF THE ANUS.

Anal fissure is often mistaken for other affections, but rarely occurs in the practice of physicians who make it a business of anal-rectal examinations where neighboring organs are involved. Often the pain is reflected from the

ELECTRICAL APPARATUS

We carry the best in X-Ray Coils and Accessories, High Frequency, Sinusoidal, Wall Plates, Centrifuges, Vibrators, Therapeutic Lamps, etc., etc. In connection with our business we are operating a shop in charge of first-class electrician for EXPERT REPAIRING and manufacturing APPARATUS TO ORDER.

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Main 4399—A5756.

fissure to the iliosacral joints, down the legs, or to the ovaries in women and the prostate in men.

Recent fissure unaccompanied by spinetterspasms as a rule can be cured without operative interference, but a chronic fissure that is accompanied by spinetralgia usually requires surgical measures.

Surgical measures should be employed whenever possible, as it is the most satisfactory and quickest method of treatment and insures a cure in every case. Incision or division of the spineter muscle is unquestionably the treatment of fissure after the primary stage; this can be accomplished in the office under local anesthesia without pain to the patient or confining him to bed.

In producing local anesthesia for the incision of fissure, the needle should be introduced at a point one-half inch below the outer edge of the fissure, a few drops are injected beneath the skin, and as the needle is carried inward

along and beneath the fissure tract the infiltration should be sufficient to raise the fissure upon a water bed and cause it to assume an anemic appearance.

When the anesthesia is complete introduce a probe pointed curved bistoury into the rectum and when withdrawing it cut down through fissure tract severing the external spineter muscle carrying the incision well out upon the skin to give sufficient drainage.

If after treatment is faithfully carried out there need be no fear of incontinence.

(Abstract from paper written by Edgar H. Brown, B.S., M.D., of Portland, Oregon, published in the Medical Sentinel.)

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Formerly called The Sweeney Truss

Is the Best Made. Fit Guaranteed.

We Manufacture
**BRACES, DEFORMITY
APPLIANCES, TRUSSES,
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We do not practice medicine; nor are we personally interested in anything but our Laboratories.

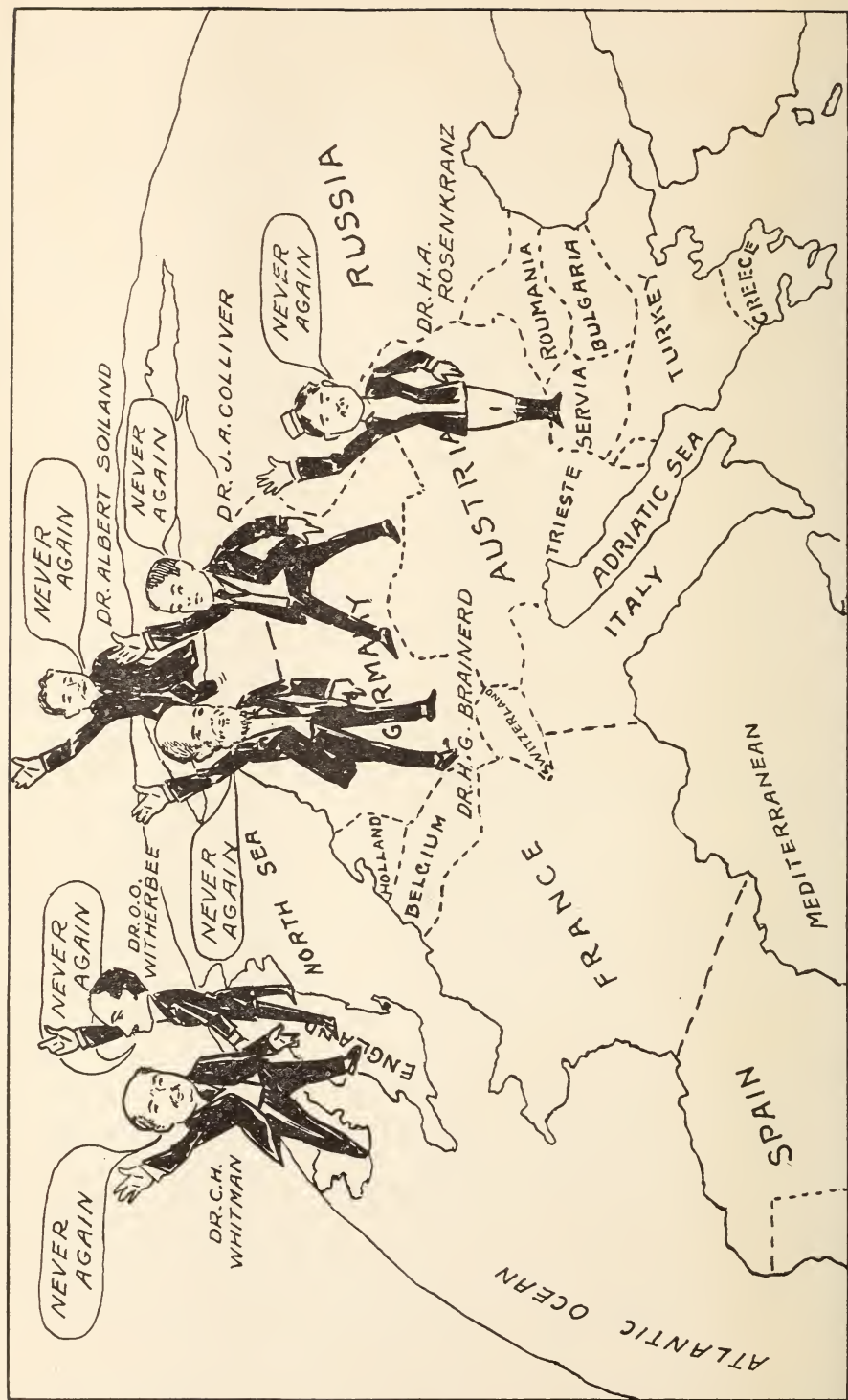
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PROMINENT LOS ANGELES PHYSICIANS ABROAD.

SOUTHERN CALIFORNIA PRACTITIONER.

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No. 8

Editor,
DR. GEO. E. MALSBARY.

Associate Editors,

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THE AVERAGE DOCTOR'S AVERAGE CASE.*

BY PAUL BRESEE, M.D., LOS ANGELES.

In considering this subject this evening I do not intend to go into the scientific discussion of any one of the many subjects I speak of. Many, if not all, of them are worth an entire evening, and all put together comprise a large part of the entire range of our study in this society. I intend to deal with some of the problems confronting us in the average case of average small means.

When the average prospective mother comes into your office to engage your services, you find, after taking a personal history, a woman who must, first of all, cut down the expense of her confinement to the minimum. Hospital and trained nurse are both out of the question. She expects her mother, mother-in-law, or a friend to take care of her and her home during her illness but she is willing and anxious to have and pay for everything absolutely necessary for the successful termination of her condition. Some of her folks wanted her to have a midwife, but she

insisted on having a doctor. That is about as much as she feels that she needs or can afford. Possibly she has engaged the services of a woman whom she describes as "an excellent nurse; not a trained nurse, of course, but in many ways much better. She has had six or eight babies herself and knows as much about taking care of a confinement case or a baby as most doctors, and a good deal more than a lot of them." You sigh, for you see in advance that your nurse will pay no attention to anything you say. Personally, I would rather have the ordinary novice care for a case for me than the average practical nurse. The former will try to do as you tell her.

To go back to the woman and her personal history. If a primipara you take her pelvic measurements. If a multipara, and her previous labors were comparatively uneventful, that procedure is probably neglected. Casual instruction is given about the care of the breasts and nipples. Patient is told to

*Read before the Los Angeles Obstetrical Society, May 12, 1914.

send samples of urine at regular intervals and is given a list of things to purchase in preparation of her coming confinement.

Personally I ask for a specimen once a month until quickening, twice a month for the next two months, and once a week after that. In all cases a sample from a twenty-four hour specimen (total amount passed being given) is demanded, as I would rather know the total amount of solids and urea passed than all the other things that could be learned from a specimen.

In the course of time you are called to attend her. Usually a very inopportune time is selected. Either you are very sleepy and hate to get up and go out, or it interferes with your round of calls, takes you from your office during office hours, or prevents your attending a show or a ball game that you had intended to take in. She nearly always wants you in a hurry, no matter if it is her first baby and first pain. That is not the worst of it though, for she is just as positive in her statements that you must not leave until it is all over.

If you find that her labor has just begun you probably tell her nurse to clip the pudendal hair, give her a bath if she wants or needs it, thoroughly flush her bowels and telephone to you in two or three hours, or when pains begin to come on moderately hard and often. You then leave, and the patient and often the others in the house, think that you are a callous, hard-hearted beast and take no interest in her welfare. She is sorry then that she didn't get Doctor ——— whom a friend told her confined her and had stayed with her and helped her through her whole labor. Sometimes you boil your gloves, scrub up, clean the patient and examine her so that you can more positively assure her that you will not be needed for several hours. They all feel better if you do. If you have your own

nurse whom you leave on the case when you go, it leaves a decidedly better feeling behind you. Of course the nurse knows how to examine the patient and can keep you informed as to the progress of the case and knows when to send for you. She saves you lots of time and trouble. In any case the folks are so glad to see you when you return that they don't remember thinking bad about you unless the unexpected has happened. On more than one occasion I have left a primipara after finding that the os would admit one finger, first telling her that I would return in two or three hours and that she would not begin to get busy for a long time after that, to find when I returned in the stipulated time that the stork had beat me to it by an hour or more. If things have gone off well, as they nearly always do in such cases, the experienced practical nurse always crows over you in a most exasperating way and the patient and friends say unkind things about having "a doctor next time who knows his ousiness." The nurse always says, "Just get me and we'll get along all right whether we have a doctor or not." She looks and feels very important and when you make your subsequent visits she always rubs it in. You will find in such cases that she thinks she ought to run the whole thing and that she usually does. It does her so much good that I suppose we ought to be glad to let her have the experience once in a while. I'd give a good deal to have things occur occasionally that would make me feel as big and important.

Usually when you return you find that the woman has made some progress and is beginning to think she ought to be through soon, at any rate that it is cruelty not to start giving her chloroform. If her pains are of that sharp cutting character which are so hard to bear and do so little good, you find that a dose of morphine ($\frac{1}{4}$ to $\frac{1}{2}$

gr. hypodermically) will help her immensely. I find that a large dose, unless the woman is small, is very much better than a smaller, and I have never had occasion to regret it, not even to worry about it in the least. Usually it will nearly or entirely stop pains for a couple of hours during which the patient sleeps, and when you next examine her you find that the parts have dilated and the muscles relaxed in a way that seems magical at first. I think that it often shortens the labor by hours, besides giving great relief from pain and making the patient more easily anesthetized and managed. Chloral usually acts about the same. H. M. C. I have found acts beautifully, even better than morphine, but as I always have to work over the babies after its use I have quit it. Sometimes it has looked like the baby would never breathe and I have never used H. M. C. without having to give the baby artificial respiration for ten minutes or more. I consider it dangerous.

We are taught that chloroform is too dangerous to be given to the parturient woman. I confess that it is my anesthetic of choice and I always use it except in cases that I suspect may be eclamptic or where I have to completely anesthetize the patient to perform some operation. In such cases I use ether. I find that chloroform will control the patient quicker, give relief from pain better and is more readily handled by the inexperienced person. To control my patient with ether I have to have her more completely under and I am afraid of keeping her in that condition unless I have a skilled anesthetist. The husband, mother or friend will usually have to be urged to push the chloroform during the expulsive stage and they will never get her under ether until the pain has passed. I like to have my patient close to the border of "The Land of Nod"

during the last few pains, at least, and if she is there it is very easy to check the pain if I want to. I try to protect the perineum by the use of the anesthetic as much as by stopping the descent of the head with my hand. The latter means, by the way, is by direct pressure on the child's head and never by pressure on the mother's soft parts. Of course the danger referred to is the danger of causing some degenerative change, such as acute yellow atrophy of the liver, as the immediate danger of death from either anesthetic is practically nil if ordinary care is exercised. Where I can, I prefer to confine the patient in the so-called English position, i.e., on her side. This requires the service of another assistant. I find that I have a better chance to watch the perineum and to keep the patient clean.

During the labor and the after care of the woman as well, the most difficult thing to do is to get and maintain a fair degree of cleanliness. The patient sometimes objects to being clipped and always objects to being shaved. The water which is ordered boiled and cooled is often contaminated by the nurse who wants to see if it has cooled. She will always insist that the cover has not been removed from the vessel if she is asked. Often the gauze and cotton have been removed from the container in which they came. In such cases it is useless to try to do aseptic work. We must go back to the days of antiseptic surgery and try to kill our bacteria as we go along. When we have done our part we try to keep up the good work by having the nurse use an antiseptic wash and tell her not to touch the vulva. The stitches do better wet than if kept dry and dirty.

After the baby has been delivered it receives your favorite antiseptic in its eyes and after the cord has ceased to pulsate it is ligated or clamped and

cut. Perineal tears are looked for and if found repaired either before or after the placenta has been delivered.

If the patient and attendants have been told that two-thirds of all primiparae are more or less torn during their deliveries, it will often cause you less trouble when you explain that it will be necessary to take some stitches. Many people think that a good doctor will prevent a tear every time. It is well to explain at this time that the cervix is always torn, but that it usually regains its normal condition in a few weeks. If the patient has not been told this she is apt to think ill of you when she is subsequently told that she has a lacerated cervix and needs an operation.

Many women think that the abdominal binder will restore the figure to its previous shape, and most women find that the binder, by its support, gives a great deal of comfort. If neglected, except on the request of the patient, you will be blamed if the sylph-like figure of yore is not recovered.

After the mother has been attended to and is comfortable again and the baby's cord has been tied and dressed, they all want to know how much the

baby weighs. You would think that the baby's weight was the most important thing about the confinement to hear them talk. If you have no scales you are looked at in a manner to suggest that you have cheated them. If you have and find the weight below their guesses, your scales are always wrong. You find that the normal sized and over are always over guessed, and that small ones are as regularly under-guessed.

You will find in these cases that you will have to make more calls during the puerperium than on the patient of better means in order to secure, by repeated demands, something approaching decent care. If you insist enough the nurse will sometimes be fairly clean and take pretty good care of both mother and baby. It is usually hard to get her too keep the neighborhood out and give the patients the quiet and rest that they need. It is also difficult to get the patient to stay in bed long enough to get well.

That so large a proportion of these women do well must be due to the fact that an All-wise Providence has arranged things to the end that they may 'multiply and replenish the earth.'

900 L. A. Investment Bldg.

INDICATIONS FOR ABORTION.*

BY M. L. MOORE, M.D., LOS ANGELES.

The subject of this discussion, indications for abortion, is of such importance from a moral and medical aspect, that we who represent this most noble vocation, the grand profession of medicine, must decide after consultation, calm deliberation, and a weighing of all the facts, whether we have the right to sacrifice the nonviable intrauterine life for the preservation of another life, the mother.

We, as scientific men, recognize cer-

tain pathological conditions occurring in pregnancy, developed as a result of pregnancy, others pre-existing, which we know both from clinical experience and statistics mean the loss of both mother and foetus if allowed to continue. The Roman Catholic Church holds that the taking of life is not justified under any condition. Of this I make no criticism, but we, as scientific men, take the position that the saving of a mother's life, or avoiding

*Read before the Los Angeles Obstetrical Society, May 12, 1914.

serious sequelae if pregnancy is allowed to continue, is sufficient reason for the sacrificing of an utterly unknown quantity.

I can not, however, proceed to the discussion of indications for abortion without, first, paying my disrespects to a class of men we justly call criminals. Unfortunately for the poor victim, the majority of these vampires are unskilled and unclean, infecting their patients, either causing death or making wrecks from pathology in the pelvis, resulting from a milder infection. I am sorry to say that also classed with these men are doctors, graduates of some of our best medical colleges, who will from the slightest excuse, if the fee is large, commit this crime.

There is no difference, whether it be a regular M. D. or an unskilled man or woman, murder has been committed, and I have, as probably have some of you, been called in to clean up some of their dirty work, or limit the extent of damage.

In reviewing the various text-books from the time of my graduation in 1880, to the present, it is interesting to see from the advancing medical knowledge, the changes in the position of medical men as to the indication for abortion. This change has been brought about by the advancement made in both medicine and surgery. In my review of the text-books, Williams sums up the situation, or divides the indications into three groups:

1st, as a direct means of saving human life.

2nd, to do away with a condition if allowed to continue threatens her life.

3rd, to avoid certain dangers which may supervene if pregnancy be allowed to continue to full term.

If these three groups are carefully analyzed and studied, we see no other consideration than the saving of a mother to her family or husband, that justifies our performing this operation.

We proceed conscientiously. We know that it is utterly impossible for the child to reach a viable age, and conserve the life of the mother; religion, the courts, and the medical world sustains us and we operate, feeling a solemn responsibility.

The first indication I wish to mention is pernicious vomiting. Here we must differentiate from reflex and neurotic cases. The reflex cases due to pelvic conditions, such as misplacements, tumors, are easily determined. In the neurotic type the patient may resist all efforts of treatment and be almost on the verge of death from starvation. In these cases we cannot fail to notice the neurosis. We also find by an analysis of urine an absence of findings indicative of kidney changes as well as those in the liver. Studies of the urine in pernicious vomiting show the total nitrogen normal, but the ammonia nitrogen which should be about five per cent, is increased at the expense of the urea nitrogen, rising as high as 20 to 40 per cent., according to Williams.

This toxic agent produces changes in the central lobule of the liver resembling acute yellow atrophy. When this condition exists, if the uterus is not emptied the patient passes rapidly into a condition of coma and dies. Do not delay. Operate as soon as a diagnosis is made, as early interference gives her the only chance.

There can be no difference of opinion as to its advisability in the melancholic or insane. I have in mind a case of a young woman twenty-three years old, who developed puerperal insanity. One week after delivery the woman's reason was destroyed for some six months, finally taking the form of melancholia. While in this condition she became pregnant. A consultation with Dr. Brainerd was held, and he concurred that to allow it to continue would mean a permanent loss of rea-

son, and possibly her death. It would have been a crime to have allowed this to continue.

Contracted pelvis is no more an indication. Cæsarian section is safe, insuring a full term baby, and as an operation of election saves every mother.

To aid an unfortunate girl in order to save her disgrace and her family, which may be prominent socially, we dismiss by saying, "Never." We may prevaricate and call her condition any kind of tumor you like, removing it at full term and disposing of it to some good family, thereby protecting the girl and her family. To do this has been my privilege several times during my professional career.

The question as to the advisability or necessity for abortion in chronic nephritis is a much debated one, and one in which the operator must use his own judgment following the line of treatment indicated in the particular case under consideration.

Albuminuria and the presence of casts is not an uncommon condition in pregnancy, and the absence of severer symptoms calls rarely for such active interference as I am discussing.

During the last month of pregnancy the urine of nearly all women contains casts and leucocytes. The existence of fatty, granular or bloody casts would indicate a more serious degeneration of the kidney structure, and occurring in a case of chronic nephritis in which previously they had not existed, might indicate approaching danger. By no means do all cases of chronic nephritis become worse through pregnancy, but they require careful watching and rigid dietary treatment.

In chronic nephritis, according to Hofmeier, the fetal death rate is 60 per cent., and especially in primigravidae the disease is made worse and the mother's life more seriously is endangered with each succeeding month

of gestation. The chances for the child are so small and the risk of the mother's health and life so great that in pre-existing nephritis or in nephritis developing early in pregnancy, evacuation of the uterus is usually advised, especially if other methods have failed.

With increasing albuminuria, elimination below the normal, much ventricular hypertrophy, marked nervous disturbance or albuminuric retinitis, intervention is imperative.

Yet very rarely in chronic nephritis the woman may go safely to term with no apparent ill effects.

The strictest watchfulness on the part of the physician is necessary. There are, however, certain indications that point imperatively to the induction of premature delivery, in the interests of the mother, viz., visual disturbances, continued headache, pulmonary or other marked edema, marked cardiac disturbance, frequent nose bleeding, continued increase in casts and albumin in the urine, and uremia.

In short, it is more often the acute exacerbations of a chronic kidney disturbance that calls for prompt treatment and intervention.

Except in localized processes and in the fibroid type of phthisis, the influence of pregnancy generally is bad. The disease often pursues a more active course in advanced gestation. Respiration is more or less crippled in the later months and the infection is prone to extend with renewed virulence during the puerperium and lactation.

In light and incipient tuberculosis no harm can come from the early termination of pregnancy, and often the course of the disease may be retarded thereby.

The indication would seem plain when the disease grows worse upon the onset of pregnancy. In the severer types of the disease interference usually will do no good.

With reference to influence of pregnancy upon pulmonary tuberculosis obstetric opinion is divided. Pinard is totally opposed to the interruption of pregnancy in tuberculous women. While he grants that the disease may be aggravated by gestation, he declares that it is not retarded by abortion. His advice is to treat the tuberculosis and watch the pregnancy.

Veit would be governed more by the individual condition than by the fact that the woman has tuberculosis. He adopts as the main clinical guide the gain or loss of body weight. A steady gain is proof that the disease is not seriously complicated by pregnancy; on the other hand, in progressive emaciation nothing is to be gained by abortion; it is too late to interfere. In certain instances between these extremes, in which the gain is irregular or insignificant, abortion may offer some hope of prolonging life.

A large array of authorities counsel interference in a greater or less proportion of cases.

Rosthorn thinks that a febrile process in tuberculosis, whether new or old, demands intervention, and especially if the disease is located at the arytenoid cartilages.

Teeklenborg has made an extensive study of the subject and has observed that this disease, though mild in the early months, often takes on a rapid course in the later stages of gestation. He pleads for early abortion, believing that apparently hopeless cases may sometimes be rescued from death if relieved early of the pernicious influence of pregnancy.

Abortion is indicated not so much as a curative measure as for the reason that it removes a grave etiological factor in the course of the disease. This applies especially to primigravidae with incipient tuberculosis which has not yielded to the usual therapeutic measures.

One question arises; has pregnancy any influence in producing laryngeal tuberculosis in a person already afflicted with tuberculosis of the lungs? It is impossible to give a satisfactory and direct answer to that. However, it has been very definitely worked out that pregnancy has a deleterious effect upon laryngeal tuberculosis if it is already established. In cases where there is a diffuse tuberculous infection of the larynx, we have to fall back to an early interruption of pregnancy as the only means of saving the life of the mother.

There are some exceptions to this rule. If the woman is first seen at the end of pregnancy, then a few weeks make no difference and it is best to wait in the interests of the child. Otherwise the life of the child can be regarded as a negligible factor, since, in almost every instance it is lost.

Although a patient with a valvular lesion of the heart is necessarily looked upon as being in a more or less serious condition, which demands care and observation, no matter how perfect compensation may be at any given time, my experience has convinced me that a large part of the profession fails to recognize the importance of pregnancy and labor as complications of a previously recognized heart lesion.

In valvular disease of the heart in pregnancy the danger arises chiefly from the muscular exertion of labor and from changes in the blood pressure at its close. This danger is greater the more advanced the pregnancy. With full compensation the labor may be as well borne as in normal conditions. With broken compensation the mortality is extreme.

It should not be forgotten that the bad effects of pregnancy are not confined to the labor. The nutrition of the heart is impaired by dyspnoea, and cyanosis.

The lesion which has been accompanied with the most serious consequences is unquestionably mitral stenosis, and various writers have gone so far as to claim that the discovery of a mitral stenosis is sufficient indication for the performance of abortion.

Next in importance are the lesions of the aortic valves, while uncomplicated mitral regurgitation is of distinctly less importance than the other lesions.

That an added burden is thrown on the heart during pregnancy is shown by the physiological hypertrophy which takes place, the heart accommodating itself to the new condition. It must follow, therefore, that a heart which has already been taxed to compensate for a valvular lesion may fail when an added burden is placed upon it, particularly a burden which is steadily increasing throughout the nine months of pregnancy.

The rules which must be followed in these cases, therefore, cannot be definitely laid down, and the degree of compensation in a given case must be taken as the guide for treatment. Many patients are allowed to continue with their pregnancies to a point where abortion will do them no good whatsoever.

If an abortion is performed in the early months of pregnancy, there is every reason to believe that the patient will survive the operation, and that although perfect health will never be restored, several months or years of comparative comfort may be secured for the patient by meeting the indication promptly.

It is safe to conclude:

1. That an organic heart lesion, even if perfectly compensated, should arouse apprehension and call for constant observation if pregnancy continues.

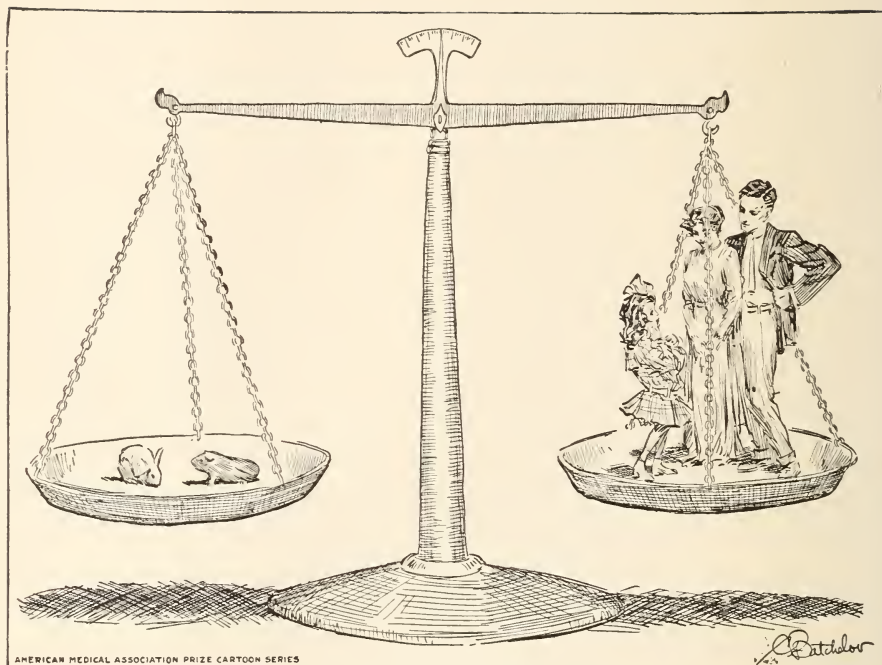
2. That in case pregnancy becomes

as a complication when the heart lesion is imperfectly compensated, the indication is for immediate relief by abortion, for a heart which is not able to care for its ordinary work, has no chance of supporting the added burden of pregnancy.

In conclusion I wish to speak of the legal side of this subject.

The laws of the state of California only permit the performance of an abortion when such a step is necessary to save the life of the patient. But even when performing such an abortion as is sanctioned by law, the practitioner may subject himself not only to civil suit for damages by a husband, but even to criminal prosecution, unless he safeguards himself by absolutely refusing to perform such an abortion without first having called in one or more in consultation to confirm his diagnosis, and thus give to the treatment a frankness and fairness which leaves the matter above suspicion. Without this safeguard, the irate husband may bring an action for damages against the doctor for performing an illegal operation. The wife, being unscrupulous, would testify that the operation was merely one of convenience. The unsuspecting doctor must admit that he performed the abortion. He has no one to substantiate his diagnosis. The question is submitted to a jury only too willing to believe the woman, and the result a heavy verdict, followed later, perhaps, by indictment by the grand jury and a trial for a penitentiary offense. The risk that the practitioner runs in performing secretly a lawful abortion cannot be brought too forcibly to your attention, and surely it is folly to run such risks when such a complete safeguard can be readily provided.

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EDITORIAL

THE LOS ANGELES OBSTETRICAL SOCIETY.

In this issue we publish the scientific proceedings of the first meeting of the Los Angeles Obstetrical Society. Here we find illustrated in a practical way the high character of work being done by this organization. There is abundant room for such a Society in the city of Los Angeles, and with the further growth of the city, the importance of this Society will be still more evident. At the present time, the membership and waiting lists of the Society contain practically all legitimate practitioners in Los Angeles, who are devoting attention to the specialties embraced by the Society. Suitable precautions have been taken to maintain the high character of membership so essential to the permanency and dignity of the Society. Petty jealousies are here lost sight of. The President of the Society has very emphatically

declared in favor of scientific attainment as the only criterion of fitness for membership. So that this Society bids fair to be a real and permanent addition to medical Los Angeles.

WAR.

The European conflict has stranded many of our medical men abroad. It will further affect the profession in this region through raising the prices of many of our supplies and instruments. With a continuance of the strife, the greatest professional and scientific loss of the age will occur through the suspension of the work of the laboratories and clinics that have contributed so much to the present state of our knowledge and that have promised so much for the immediate future. However, with Europe off the tourists' map, the popularity of this region will probably be greater than ever.

ARTIFICIAL RADIUM RAYS.

Just when so many are scrambling for some of the super-priced radium, the announcement is made that it is possible to produce radium rays artificially. With a new X-Ray machine, it is proposed to produce rays having as short a wave length as those commonly known as radium rays. This requires a rapidity of interruption far beyond any heretofore obtained. Meantime radium continues in great demand at fabulous prices, and the use of radium emanations is increasing in popularity.

CONSERVATION OF WILD LIFE.

The Initiative and Referendum are being used for commercial purposes in this State by certain promoters of a statute to permit the sale of all game including deer and quail.

The commission men and French restaurant keepers of San Francisco are the parties most interested. If the plans of these two commercial interests carry, the wild game will disappear very quickly from within the borders of this State.

The federal government and neighboring States have passed protecting laws and all the States bordering on California have enacted the "No-Sale" of game laws. Deer have not been sold in the markets since 1893 and quail have not been sold since 1901, but an initiative petition is now being circulated by the larger hotels, restaurant keepers and commission men to place all our game on sale and allow it to be slaughtered by the market hunters.

The attention of the public is called to this matter so that they will not sign the initiative petition, which is now being circulated and, if carried, would be a step 25 years backward and a disgrace to the State of California.

Will you not call the attention of your neighbors to this commercialization of the election law and to the sure

obliteration of quail, deer and other game if the city hotels, restaurant keepers, commission men and market hunters are successful in accomplishing their ends.

OPERATIONS UPON THE RECTUM UNDER LOCAL ANAESTHESIA.

By J. F. Saphir, M.D.

New York City.

1. Ethyl chloride spray can be used in cases requiring operation outside of the sphincter muscle.

2. Cocaine, B. Eucain, Novocain, Holocain, or Stovain should never be used stronger than 1-8 or 1-10 per cent solution, on account of the toxic effects, which assert themselves within 5 minutes after operation.

3. To overcome the feeling of weakness and faintness, cold sweat, and severe excruciating pain, insert a suppository of morphine sulphate Gr. $\frac{1}{4}$ before operation, or hypodermically immediately after operation.

4. Sterile water produces distention pain during infiltration, but gives no pain during or after operation, and is preferred in mucous membrane operations, where the nerve supply is small.

5. Quinine and urea hydrochloride solution is the local anaesthetic of choice in rectal operations; 1% solution should be used in mucous membrane work where sloughing followed by scar tissue is desired; and a $\frac{1}{4}$ or $\frac{1}{2}$ % solution should be used in skin work. Stronger solutions prevent healing by primary union. Anaesthesia is produced in from 3 to 20 minutes, and the parts are anaesthetized for 3 to 10 days, a sufficient length of time for wounds following operation to heal.

6. For the production of local anaesthesia about the rectum and anus, the Sapiere syringe for local anaesthesia is most practical. (Described in New York Medical Journal, Feb. 4, 1911.)

Abstract from American Medicine,
February, 1913.



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES, 1912-NO. 6.

THE VULTURES!

EDITORIAL NOTES

Dr. L. Edelman of Berlin is at the Angelus.

Dr. G. Kerriek of Denver is staying at the Hotel Lankershim.

Dr. G. G. Cushing of Spokane has been stopping at the Hotel Lankershim.

Dr. W. R. Livingston of Oxnard is marooned in Europe.

Dr. Harper Peddicord has moved to Downey.

Dr. J. E. McKillop has opened offices at Huntington Beach.

Dr. C. P. Shaffer of Pasadena has moved to San Bernardino.

Dr. F. Farris of New York recently registered at the Hotel Alexandria.

Dr. W. A. Weldon of San Pedro has recovered from an attack of diphtheria.

Dr. Carl Hendrickson of Detroit is registered at the Hotel Hayward.

Dr. Fred Murphy of St. Louis has been stopping at the Hotel Alexandria.

Dr. R. W. Craig of Phoenix was a recent arrival at the Hotel Van Nuys.

Dr. F. E. Wilson has returned to Huntington Beach and opened an office at 406 Ocean avenue.

Dr. Bim Smith of Hermosillo believes the Mexican revolution is over and is reopening his hospital.

Dr. F. J. Peters has become associated with Dr. T. F. Taylor of Beaumont.

Dr. W. A. Edwards of Los Angeles has been suffering severely with neuritis.

Dr. H. Jennings of Phoenix, Arizona, was a recent arrival at the Hotel Hayward.

Dr. H. Bodeheim of New York City recently registered at the Hotel Angelus.

Dr. Harvey W. Wiley has been selected as President of the National Mouth Hygiene Association.

Dr. F. F. Farnsworth of Rochester, N. Y., has been stopping at the Hotel Van Nuys.

Dr. R. E. Chase of 438 South Adams street, has been patiently nursing the sting of a stingaree.

Dr. S. L. Corpe of El Monte, has been spending a vacation at Santa Barbara.

Dr. Lorena Breed has been appointed head of the Laboratory Staff of the Pasadena Hospital.

Dr. C. E. Ide and his family are spending the summer at 624 Linden avenue, Long Beach.

Dr. Robert Blake Griffith of Mabery Heights has returned from visiting the Eastern surgical clinics.

Dr. T. M. Larsen of Jordan, Missouri, has been stopping at the Hotel Alexandria.

Word has been received from Dr. C. H. Whitman, that upon his return he may possibly take another trip, but not farther away than Watts.

Dr. C. H. Whitman and Dr. O. O. Witherbee, when last heard from, were stranded upon "The Tight Little Isle." They are both anti-war advocates now.

Dr. John C. Ferbert, after motoring 1750 miles to Seattle, took a boat to Alaska. The motoring was no joke, but the balance of the trip was a real rest.

Dr. R. F. Palmer and Dr. J. M. Greer have effected a partnership with the object of developing the South Side Hospital at Phoenix, Arizona.

Dr. James Burton of Cooperstown, New York, has decided to make his home at 483 South Marengo avenue, Pasadena.

The Miami Copper Company of Globe, Arizona, has offered free anti-typhoid vaccination for the children of all its employees.

Dr. E. M. Bixby has removed to the offices formerly occupied by Dr. Davis in the Pomona Investment Building, Pomona.

Mrs. L. B. Mullen, proprietor of the San Pedro Hospital, has been awarded the contract for caring for all marine cases for the fiscal year beginning July 1.

The Medical Symposium Society elected the following officers recently: Dr. E. H. Wiley, president; Dr. J. C. Ferbert, vice-president; Dr. Michael Cremer, secretary and treasurer.

Dr. H. A. Rosenkranz of Los Angeles is now Surgeon-Major in the Servian army. He has already served through two wars. His address is care American Consul, Belgrade, Servia.

Dr. Wallace Reed of Covina took as a bride Miss Mary Julia Birdsall of Vermont, a Bellevue Hospital trained nurse, July 6. Such are the possibilities that may grow out of associations in ward and operating room.

Dr. C. A. Shepard won a decisive victory when the voters of Sierra Madre decided in favor of permitting the sanatorium to stay by a vote of 367 to 210.

Office hours available, outside rooms. Reception room elegantly furnished. Both phones. Office attendant. For further particulars call at 612 Brockman Bldg.

Early on July 25 fire destroyed the central building of Bishop's Sani-

tarium in South Pasadena. Loss about \$15,000. The owner, Dr. T. W. Bishop, expects to rebuild.

Dr. H. C. Stinchfield, Chief Surgeon of the Southern California Edison Co., is installing at the various power plants of the company twenty-two lung motors.

Dr. Arthur Maurice Tweedle and Dr. Edwin Francis Jones have opened offices in the Miles & Bradbury Annex, corner Main street and Walnut avenue, Huntington Beach.

W. Earl Flynn, after exploiting the preachers of Los Angeles and winding up his campaign with the sale of hair oil and such like, has transferred his field of activity to Long Beach.

The California College of Drugless Physicians has been incorporated. Capital stock, \$25,000; subscribed, \$300. O. J. Nichols, H. A. Elbi, John E. Ward, directors.

Dr. James H. McBride, upon his return from the East, declares that the entire East is anxious to come to California next year. We had suspected as much.

At the annual meeting of the American Association of Medical Examiners this year the importance of blood pressure tests received considerable attention.

Dr. A. S. Kelley, president of the Oakland Board of Education, has been enjoying an outing trip up the Feather River since his recovery from a severe attack of typhoid fever.

A number of cases of ptomaine poisoning in various parts of the state have been reported. It would seem that the medical men might well do some valuable missionary educational work along this line.

Dr. G. W. Tape, late of Arrowhead Springs and more recently at Bimini Springs, is now in charge of Hot Lake Springs Sanatorium, Oregon. The Doctor was elected president of the Eastern Oregon Medical Society.

WANTED—Work as anesthetist. Registered nurse in California. New York training. Abundant experience in anesthetics. Drop method used. Address No. 51, care of the Southern California Practitioner.

The European war catches Dr. H. G. Brainerd, Dr. John A. Colliver and Dr. Rosenkranz in Vienna; Dr. W. T. McArthur in Heidelberg and the daughter of Drs. Rose and Frank Bullard in Berlin.

The members of the Pomona Valley Medical Society held high jinks at a grand barbecue given at the palatial country house of Dr. J. K. Swindt in Live Oak Canyon, Pomona, Friday, July 10, ? ? ?.

Dr. H. Clifford Loos of San Diego has been sued by a woman he delivered last year who claims to have been permanently injured. Wonder if he received a fee commensurate with the value of the patient as placed upon herself.

Dr. Agnes McCrea died of pneumonia July 31. The doctor was one of the physicians at the Clinic of the Tuberculosis Society, where her faithful and conscientious service and charming personality won her many friends that mourn her loss.

FOR SALE—Large, almost new X-Ray and High Frequency apparatus with accessories. Motor and Rotary quenched spark gap of latest pattern. Cost \$400. Will sell for \$200 cash. In perfect condition. M. W. Dewey, 460 10th St., San Pedro, Cal.

Dr. W. F. Snow, Secretary of the American Social Hygiene Association, gave a lecture on human inheritance at the University of California, Berkeley, July 13. Upon the 15th Dr. Vernon L. Kellogg of Stanford University delivered a lecture on the marriage contract. Both are old but timely topics.

Dr. H. T. Summersgill has been appointed superintendent of the new University of California Hospital in San Francisco. Dr. Summersgill was formerly superintendent of the New Haven (Conn.) Hospital, where the Yale medical students are given clinical work. He is a graduate of Brown and Johns Hopkins Universities.

The San Francisco Board of Health has recommended an ordinance that provides that only hygienic tamales may be sold. Special attention will be given to determining whether the "chicken" tamale is always a chicken tamale, and as to what relation it may have to the Belgian hare, the playful gray squirrel, and other pets of farm and field.

Dr. I. W. Hazelett, a graduate of Jefferson Medical College and well known in Southern California, died of pneumonia at the Pacific Hospital August 4. The doctor was fifty-eight years of age, came to California in 1853 and was in partnership with Dr. Bayliss of San Bernardino since 1887. He leaves a widow and daughter, to whom our sympathy is extended.

Dr. Frederick Hunning, a graduate of Bellevue Hospital Medical College and a native of Arizona, died at Ventura, July 3, at the age of forty-four years. He is survived by a widow and two little children, a boy and girl. The doctor had supplemented his medical education by travel and study abroad and apparently had a brilliant future awaiting him.

Dr. Robert Wills Wilde (1815-1876), father of Oscar Wilde, was the most famous surgeon in Ireland, and a specialist in diseases of the eye and ear of international fame. He was known throughout Europe as "The Father of Modern Otology." In 1853 Dr. Wilde was made Surgeon-Oculist-In-Ordinary to the Queen of England; in 1853 the King of Sweden created him Chevalier of the Kingdom of Sweden, and decorated him with the Order of the Polar Star.

According to statistics sent out by the California Board of Charities and Corrections there are nearly nine thousand insane persons in California confined in the state hospitals. There are 2109 in the Southern California State Hospital, 2131 in Stockton, 2082 in the Napa, 1382 in Agnew and 1065 in the Mendocino State Hospital, a total of 8769. And strange as it may seem, some of our alienists seem to believe that this does not represent the total insane population of the state.

The sale of patent medicines and the popularity of quacks has declined greatly in England since the Insurance Act went into effect. People who formerly doctored themselves with quack nostrums, or employed irregular so-called doctors, are now able under the act to avail themselves of competent professional advice. A further benefit is that the great increase in the number of doctors' prescriptions to be made up has enabled the druggists to reduce the price of dispensing to their customers generally.

To an assemblage of physicians of Madera County, at Madera, California, Dr. Charles V. Cross of San Francisco recently delivered a very interesting and instructive address on "The Physician as Medical Examiner, Consulting Surgeon, and Adjustor for Life, Accident, and Health Insurance Companies

and Associations, and also for Corporations and Individuals." This is a subject upon which the Doctor is well qualified to speak, and one that is of great interest to the profession at this time.

One of the saddest occurrences in the annals of the medical profession of Los Angeles was the suicide of Dr. Edmund M. Cahen at the family home, 1408 Magnolia avenue, Monday, August 3rd. Dr. Cahen graduated from the medical department of the University of Southern California in the class of 1908 and had recently returned from a year's post-graduate work in Europe. With his friends in the profession he was always bright, cheery and very much beloved.

On the doctor's desk was a note addressed to his mother, asking forgiveness for his act. The text of the note follows:

"My Darling Mother

"Please forgive me. You have been the most perfect mother in the world. I have not been happy for years, although I have tried to make people think so.

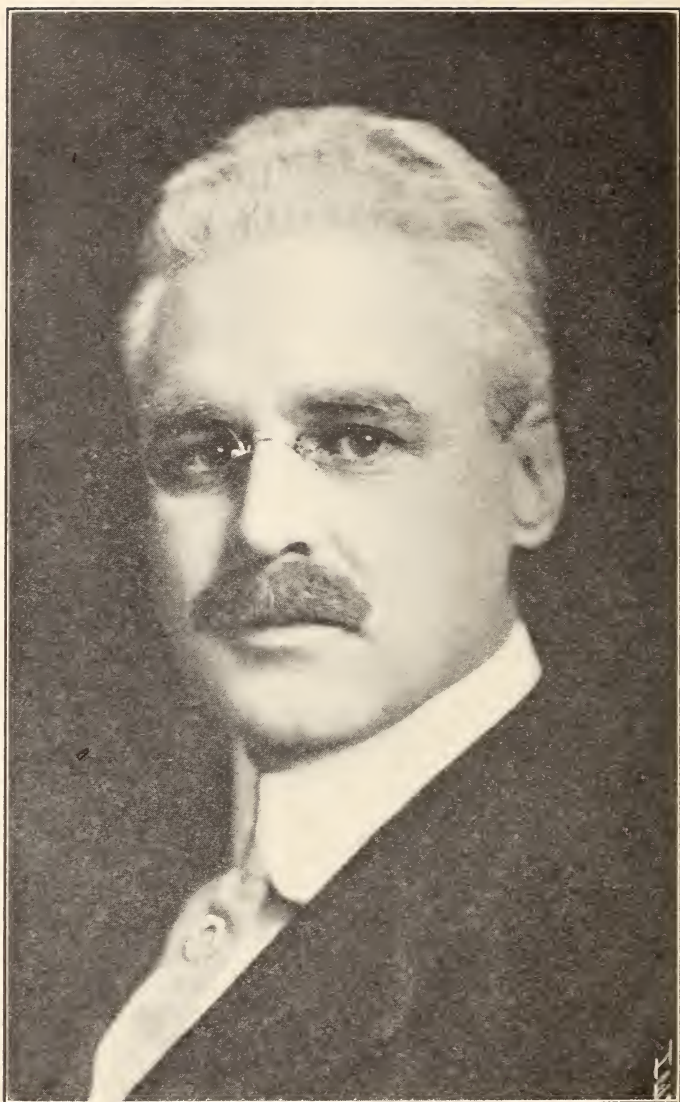
"Don't think I have done anything wrong. I know Frank and Gladys will look after you and Melaine.

"Goodbye, dear ones.

"EDMUND."

After a long talk with his mother on Sunday night, Dr. Cahen went out for a walk. His mother telephoned to her daughter and son-in-law, Mr. and Mrs. F. B. Crook, to whom reference is made in the letter, to come to the house and stay over night. They did so, Crook sleeping with the despondent young doctor.

The doctor's death was caused by bullet wound through the heart. He was an able young man and with good health doubtless had before him a successful career.



DR. TITIAN J. COFFEY,
President of the Los Angeles Obstetrical Society.

SOCIETY MEETINGS

Los Angeles Obstetrical Society,
May 12, 1914.

Discussion of Dr. Bresee's Paper, published in this issue of the Southern California Practitioner.

Dr. Frank C. Ainley:

The essayist referred to the use of the binder. I believe that in the future we are all going to agree that the binder does not restore the figure, though it certainly does make the patient more comfortable.

I was glad to hear Dr. Bresee say that he still favors chloroform. I was, at the time, intimately familiar with the work done showing the danger of chloroform. However, there is no doubt that the woman in labor, particularly in the second stage, is protected against chloroform. There are certain chemical and metabolic evidences in favor of this. Although chloroform is probably more dangerous in early pregnancy and after delivery, there is apparently an immunity to its action at the time of labor.

We must get back to aseptic obstetrics. It is believed by some, particularly by the English physicians, that we can protect the perineum better with the patient in the left lateral position. However, I cannot see how one can, under ordinary conditions, preserve an aseptic condition of the hands with the patient in this position.

The problem of caring for the patient in moderate circumstances is very important at the present time. In Baltimore they have just opened a hospital that makes special provision for those with an income less than eighteen hundred dollars per year. When patients are admitted they are questioned, and the financial condition of the family and the income of the husband are investigated. If the circumstances warrant it, the patient is per-

mitted to go into a certain type of room at a cost less than the actual cost to the hospital. The house physician makes the examinations and takes care of these patients, for which he receives no compensation in those cases in which the income is less than a certain limit, and a small fee for the patient in a private room, although not in keeping with the usual fee charge for obstetrics. It is a step in the right direction, giving these patients proper attention at a cost they can bear.

Dr. H. M. Voorhees:

The nursing problem interests me most. I have had in the past few years quite a number of obstetrical cases among people of moderate means. It has been my good fortune to have the services of two women who are rather mature in age, some 35 or 40 years, who have had quite a little obstetrical experience. I have had no trouble with these nurses on cases. One of them is sufficiently skilled to make an examination and tell how far the labor has progressed.

Dr. A. P. Wilson:

It seems to me that the doctor has struck a very popular subject when he speaks of the practical nurse. I have not had quite the sad experience that one probably would infer from the paper the essayist has had, and I do not believe he has had altogether such experiences. I do not refer to the women who have had a number of babies and then tried to be nurses. But if we try to pick out some of the better nurses we will find they get along very well with these cases. However, I would hesitate to have practical nurses, or many of the trained nurses, make examinations. I would prefer to go across the city rather than to rely upon an examination they had made.

Dr. H. M. Ross:

I would like an expression from the members with reference to the use of the hypodermic.

Dr. Wm. Barnhart:

Dr. Bresee spoke of the use of the H. M. C. mixture. About twice in my experience I have used the full strength tablet, and now in about one-half of my cases I use the half-strength when the mother begins to call for help. I have not had any appreciable effect on the baby from this strength, and the little hyoscine quiets the nervous tension. I have sometimes repeated the half-strength. And then I use a little chloroform.

One other thing impressed me in the paper and that is the advisability of calling the mother's attention to the probability of having a lacerated cervix. That was brought to my attention recently by a case attended by a physician over in Highland Park. He had made a good repair of perineum and the patient had made a good recovery. She later suffered from backache and went to an osteopath, who told her it was due to a torn cervix and that she had had very poor care during her confinement. When she came to me she had quite a tale to tell. I explained to her what had occurred, that the doctor could not at the time of birth repair the cervix, and told her that I felt that the first doctor had taken care of her properly and that the second man had misrepresented matters to her.

Dr. Stuart Hutchison:

I have used the H. M. C. and also plain morphine, but I get better results from 1-6 gr. of morphine and 1-150 gr. of scopolamine. I was interested in the remarks regarding the protection of the perineum. Some sixteen years ago, when I was in the hospital with Dr. DeLee, we took up the use of hot solutions. We found that

the application of a hot 1-3000 solution of bichloride to the stretched perineum is fully as soothing as the inhalation of chloroform, and I use the hot applications in every case.

Dr. W. H. Mayne:

Do I understand that these hypodermics are given as a routine in all cases? There are many cases in which they are not called for at all, and they undoubtedly protract labor, whereas a little chloroform often does just as well.

Another thing is the "English" position. Do you get as good and strong pains as when the patient is on the back? My experience has been that the labor is shortened considerably when the patient is on the back, as they can get better traction on the straps.

Dr. W. V. C. Francis:

Until I came to America I had not seen the "American" method and I had always used the "English" method. If the patient is on the side, she can push better than when on the back. The "English" position has the advantage that the patient is not so much exposed as when on the back, which counts a good deal with most women. As regards the hypodermics, I never use them except in the first stage. I have used the H. M. C. six times and I had trouble with the children three times, so that I have not used it since. Pituatrin I have used and I have found it valuable after everything is removed. I doubt if it is wise to be used until after the baby is born, as I have twice had trouble with the placenta retention. As to the perineum, if I think the perineum is going to tear, as in instrument delivery, I sew it up before it tears. That is to say, I introduce at once two large sutures, entering the perineum through the skin and levator anus on one side and coming out on the other side.

This seems to me to give the best result, as the torn muscles are brought together in good apposition, and if there has been no tear, the sutures have done no harm. This, I believe, is after the German obstetricians.

Dr. H. M. Rooney:

To me it has been very difficult to deliver on the side, but it is largely a matter of the custom of the obstetrician. With the patient on the side, it is very much more difficult to keep clean, unless you have abundant assistance.

With regard to the use of hypodermics, in my experience morphine has worked very satisfactorily in the first stage. I have never given it in the second stage. Occasionally a baby will not resuscitate. I remember a case in which the baby died, ten hours after delivery, after repeated resuscitation. The mother had been given one-quarter grain morphine, which suggested itself as a factor in producing the respiratory difficulty. However, on consulting with Dr. Ainley, we concluded from the symptoms that there was a hemorrhage affecting the respiratory center.

Dr. M. L. Moore:

Pituatrin is a very useful remedy in certain cases. But the cases should be carefully selected for its use. The instructions given in the text-books and the articles we read practically describe it and I have nothing further to offer along that line. Only the other day I had a case in which the pains continued regular, strong, expulsive, and the head had descended into the cavity of the pelvis and there was no cause of dystocia in the parts below. Gradually the pains began to shorten, lessen in frequency and lose their expulsive power. I gave an injection of pituatrin and in less than five minutes the pains came on vigorous and strong and the labor was terminated in a short time. During the past year I have used it in some two dozen cases.

In some cases I got no results. In some cases I gave one injection and repeated it again after some twenty or twenty-five minutes, without any apparent effect on the contractions. But in the selected cases I have had no bad results in the third stage, as the Doctor has mentioned. At the termination of the birth of the child, the pains diminish. It would seem not to have the action of ergot to produce tonic contraction but rather produces intermittent contraction with increased strength of the contractions. I think in several cases the labor was terminated with the natural forces where I would otherwise have been obliged to use forceps. If we can stimulate such contraction, we are doing a service, inasmuch as a normal delivery is to be preferred to an instrumental one.

I was amused and interested by the Doctor's paper, for he certainly pictured my early experience as an obstetrician. I commenced practicing obstetrics in 1880, in a country town of about two thousand people. We did not have nurses. When you would arrive at a confinement case, there would be three or four women present ready to aid you. There was no aseptic and not very much antiseptic work. We did not know about bichloride and did not know much of the value of washing the hands. We did not clip or shave our patients or clean the vulva. Once in a while we had a case of puerperal fever, but such cases were not very frequent. Probably that was because we did not examine or handle our cases much. I never saw a case of obstetrics when I was a medical student, and, as I was in practice with my father, I did not get many of such cases in my early practice. But the time came when the other physicians were busy and my father was out and they had to take me. When I went to the case, there were several women present, some of whom had held me as a baby, and I saw the twinkle of go

around as much as to say "Now we will have some fun with the young doctor." I think I washed my hands. I know I was nervous. Finally the baby was born normally. After the child was born I found the uterus as large as in the full term of pregnancy. I had the courage to pass my hand in and I felt another baby coming. I sat down. Finally the women asked me if I was not going to deliver the after-birth. I said "No, there is another baby coming. I knew it all the time, but I didn't think you would believe me." The mother recovered and both babies lived and I soon became a prominent obstetrician in that region.

Dr. Paul Bresee (in closing):

The Doctor spoke of the immunity from chloroform. I doubt these women having any such immunity; it seems to me the good results are rather to be attributed to the small amount of chloroform used and the fact that the patient is anesthetized for so short a time. In regard to the use of the hypodermic, my experience has been confined to the use of the hypodermic during the first stage, when the woman is having the sharp, cutting pains, that are often more disagreeable than the expulsive pains. I have had a little experience with pituitrin, much the same as Dr. Moore described. In probably two-thirds of the cases it has worked beautifully and in the other cases I could not see that it worked at all. Another thing about the tear of the cervix. I always tell my patient to return at the end of two months for an examination, to determine whether the uterus has gone back to its normal size and position and to see if the cervix has been torn, and to see the result of the repair of the perineum. Dr. Moore's first case amused me. My first one was something of the same order. Dr. Beckett sent me to a case. When I arrived the head was on the perineum. Two old women were present. They were wringing their hands

and looking greatly concerned. When I came they appeared greatly relieved and declared that they were glad I had come. I was badly scared, but I did the best I could.

Discussion of Dr. Moore's Paper, published in this issue of the Southern California Practitioner.

Dr. E. M. Lazard:—

The production of abortion is a subject of very great interest and a very timely one, especially the indications for the induction of therapeutic abortion. It is well for us to go a little slow, especially in the cases of so-called pernicious vomiting of pregnancy. Whereas the cases of pernicious vomiting described by Dr. Moore, with impairment of kidney function and possibly some liver disturbance, are an indication for abortion, the hyperemesis of the neurotic form may closely resemble these cases and may be controlled without resorting to abortion. As to abortion in pulmonary tuberculosis, I feel that the experience of Pinard, quoted by Dr. Moore, is the best to follow. That is to say, abortion is not always indicated in tuberculosis, but in incipient and early cases often the pregnancy may be permitted to continue, with the patient under careful observation without making worse the pulmonary condition. And it is a question whether abortion may not light up a pulmonary process, just as likely as the carrying of the baby to the normal term. That is a question, however, which will have to be eventually decided by the large clinics, and we must be guided by their experience. The heart cases form a large class of cases in which abortion is not only justifiable but imperative. This is especially true of mitral stenosis. I remember such a case that died in about one-half hour after I first saw her, undelivered. She should not have been permitted to go to the end of term. In another case, where there had not been any ascertainable symp-

toms of heart trouble, the condition was announced by the spitting of blood and beginning pulmonary edema. In that case, which was close to term, we did an operative delivery of a dead baby under spinal anesthesia. The patient recovered. In a third case, in which tachycardia was the only symptom, which persisted throughout pregnancy, I terminated the labor instrumentally, and the patient developed a pulmonary edema the next day. She had been under ether only a short time. We overcame the pulmonary edema and the patient recovered, but the baby was dead at the time she was delivered. The babies have little chance of life, even if the patient carries them to the end of term, in these heart cases. The best interests of the patient are best served by early abortion. As to the social reasons for abortion, I believe there is no room for argument. Nothing should be considered, in determining the advisability of abortion, except the physical condition of the mother and her welfare. Not necessarily that it might mean her death, but the probable impairment of her health should be sufficient reason for the induction of abortion. We should take every precaution to protect ourselves, in the production of abortion, and also try to prevent the reputation among the friends of the patient of inducing abortion for convenience.

Dr. T. P. Gerson:—

I am strongly of the opinion, that if the patient's life is jeopardized during pregnancy by an accompanying condition like tuberculosis, cardiac lesion, malignant neoplasm or any other serious condition, abortion at the hands of the scientific physician is justifiable. I have no sympathy whatever with the antagonistic attitude of the church in this matter. That we should unduly consider the life of an unknown quantity—the fetus, at the expense of a

known quantity, the mother, seems to me ridiculous and absurd.

A phase of this subject of abortion which has not been touched upon tonight, and yet which to me is of vital importance, is the Economic phase. We can imagine the case of a large family of say eight or ten children, the father of which earns scarcely sufficient to keep them from starving. The mother again becomes pregnant, much against her desire and that of her husband. We physicians may have our so-called idea of "duty" in the matter, and look at it from what we may call the "scientific" or "legal" point of view, but if we were personally affected our attitude would not be much different from that of this father and mother.

As an obstetrical society, possibly it may be out of our province to discuss this phase of the question, but as individuals it is our duty to aid in the solution of these vital problems.

Personally, I believe the solution is a Social one, and is only coming through an equality of opportunity in society and through a condition that will bring to each the product of his toil—possibly some form of Socialism.

Dr. H. M. Voorhees:—

In very severe cases of pernicious vomiting of pregnancy, where the usual medication seems to be of no avail, I have thoroughly cauterized the cervix with the caustic pencil in six or seven cases and have secured immediate relief, that is within a few hours. Thus a few months ago a patient was retaining nothing and the case was becoming alarming. I cauterized the cervix and the next morning all the symptoms had subsided.

Dr. Frank C. Ainley:—

I would like to ask Dr. Moore a question. In cases of early pulmonary tuberculosis, where it is felt that the

patient has a reasonable prospect of recovery if pregnancy is not allowed to continue, what is to be our subsequent attitude if the patient again becomes pregnant a second or third time? When does our responsibility cease?

Dr. E. M. Palette:—

Another question for Dr. Moore. What are we to do in those cases in which the patient does not have chronic nephritis. That is to say, there is no evidence of nephritis between pregnancies but she has the history of perhaps three or four pregnancies with eclampsia, and she becomes pregnant again but at the time she presents herself for examination there are no evidences of kidney changes present.

Dr. Paul Bresee:—

What would the Doctor do in a case of exophthalmic goitre, where the patient becomes much worse and refuses operation? Would he, in such a case, recommend the termination of pregnancy?

Dr. E. M. Lazard:—

I would like to touch on the economic question. That is a question we as physicians have to contend with every day. It is probably a more live question than many pathological conditions, because we have that question with us all the time, whereas the other conditions are comparatively rare. We have patients in poor or moderate financial condition come to us to be confined once or twice and then they have an accidental impregnation and want us to help them out. Of course we have to turn them down. They go and have an abortion done, possibly by some colleague of good standing in the profession or possibly by one of the professional criminal abortionists. In the former case we lose a patient and our colleague gets the family; in the latter case we may lose the patient by the death route. Now, what are we to

do? It is a pretty serious question with some patients in poor circumstances who are forever becoming impregnated, and it is not unnatural that they should want something done. It is useless to talk to the husband in such a case for they will not heed our advice. The plight of such women is pitiable. Personally, it has been my rule to follow the law absolutely and turn these patients down and not do anything to bring about a termination of pregnancy. But these patients are as much in danger, as far as their mental and physical welfare are concerned, as some of the other cases in which we can demonstrate a pathological physical condition.

Dr. M. L. Moore:—

I want to ask the Society to discuss abortion in splenic myelogenous leukemia. I have such a case now, several months advanced in pregnancy. The spleen occupies about one-half of the abdomen. She plead so to have her pregnancy go on that I concluded to do so, keeping her under careful observation, examining the blood regularly and frequently. Now, at the end of six months, the blood picture has improved. She is doing well and assimilating her food. Dr. White has taken care of that phase of the case and reports improvement.

Dr. P. G. White:—

The blood picture has improved. The leucocytes have gone from 240,000 to 130,000. The myelocytes are still about 30%. The hemoglobin has remained at 60%. The woman's condition is very much the same, if not better than before she became pregnant. The spleen has not changed in size.

Dr. T. J. Coffey:—

What is the danger of hemorrhage at the time of delivery?

Dr. P. G. White:—

It is very great. That is a matter we have had to consider and the ad-

visability of putting her on treatment with calcium salts or serum.

Dr. Frank C. Ainley:—

I have seen but one case of pregnancy complicating splenic myelogenous leukemia. That was in a colored patient a number of years ago and came under observation at about the sixth month. She had a grave anemia and died undelivered shortly after she was seen.

Dr. M. L. Moore (in closing):—

When these patients come to us asking us to produce an abortion when the physical condition is such that we know they should go on, and they plead with us and cry and threaten to commit suicide, I think of the remarks Dr. Delaskie Miller used to make in Rush Medical College. After arguing with them he would come to the point where he would tell them he would do it but they must wait until the baby is two years old and then if they could catch it he would kill it. This would awaken them to the fact that abortion means the taking of a human life. As to the cases mentioned by the Doctor, I believe they were not cases of pernicious vomiting but they were neurotic cases. I am sure they could not have been cases of pernicious vomiting because we have in such cases the extreme changes we have discussed. Many of these neurotic cases will almost die from starvation, they will emaciate and get weak until their condition is alarming, and then by doing something that produces a profound impression on the patient we secure an improvement. In regard to the matter of tuberculosis when the woman has successive pregnancies, that is a very important question. If we have an incipient tuberculosis, perhaps a woman with a healed lung who comes to us in good physical condition and shows no evidence of tuberculosis except on very careful examination, it may be advisable to allow the patient to go through to preg-

nancy, counseling her to observe all the rules of health, and keeping her under close observation. Her physical state should be carefully watched in each pregnancy and at the slightest indication of a lighting up or if the woman shows a temperature or emaciation in spite of all we are doing for her, then we would be justified in doing an abortion. But if her nutrition and weight and temperature record and all are good, I think we should let her go on regardless of how many pregnancies she had. If I were to interrupt one of these cases I think I would sterilize her. Where there are successive pregnancies that injure the patient and cannot be prevented otherwise, and it becomes necessary to interrupt a pregnancy, I believe we would be justified in taking measures to prevent subsequent pregnancies rather than to repeatedly abort the woman. There is another important condition which has been mentioned and that is chronic nephritis. I have seen a good many cases and I wish to speak of one now that Dr. Ainley saw with me in consultation. I had known the woman since her birth, having officiated at her delivery and been her family physician ever since. At twelve years of age she had malignant scarlet fever and developed chronic nephritis. The urine did not clear up for something near a year. She then seemed to be well for a number of years. About a year and a half ago she was married. At the time the mother came to me and we discussed the advisability of pregnancy. Careful examination of the urine was made several times without finding anything abnormal. She became pregnant and not until the third month of the pregnancy did she show evidences of nephritis, when we found casts and albumin. She was put on proper diet and her elimination was looked after. I think it was about the fourth or fifth month the Doctor saw her with me. The urine was about one-fourth of the

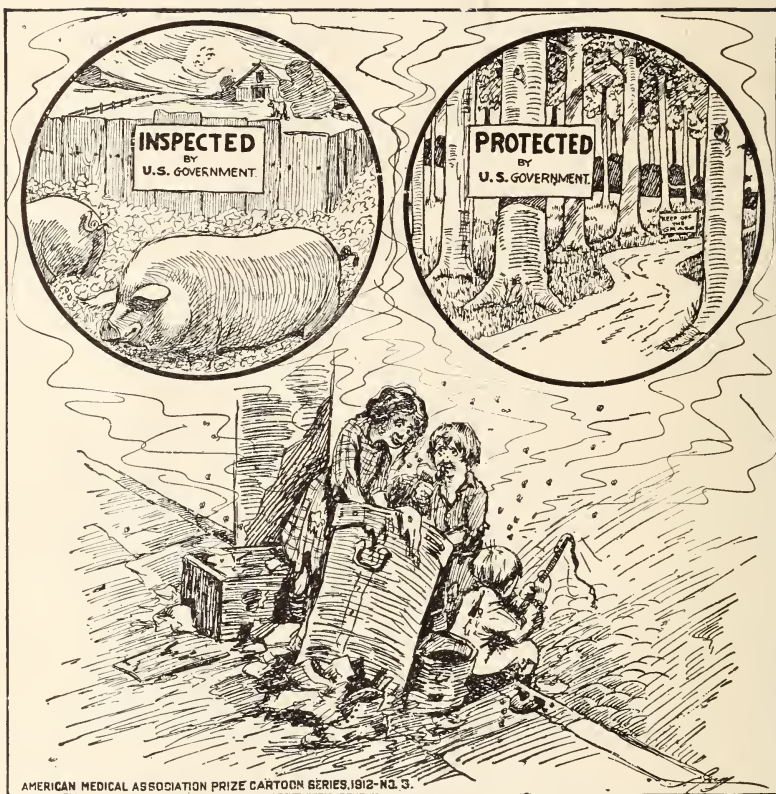
volume albumin. Her solids and urea were good. We decided to watch her, examine her urine daily, and thus I tided her over until the seven and a half or eighth month, when she developed symptoms indicating there would be permanent damage to the kidneys unless the pregnancy were interrupted. I hoped to get a viable child as she plead and cried for it. I interrupted the pregnancy and the baby lived only a short time. That was five or six months ago and the urine still shows albumin and casts and I fear there has been permanent damage to the kidneys. While possibly contrary to some of the remarks made in my paper, I believe we subjected that patient to very serious danger of permanent damage. She is begging and is disappointed when I tell her she must not become pregnant yet. I do not know what the results will be. Where we have repeated attacks of eclampsia, as Dr. Pallette described, I have not in mind such a case, but I think it is largely a matter of carefully watching the patient. We should be guided by the urinary findings in such cases. The first indication of dropping of the urea is important. We must watch the nervous condition. Thus we may be able to give the woman a chance. Because a woman has had eclampsia does not mean that she must not have a baby. I remember a case of Dr. White's which I saw during his absence, in which the patient had a perfectly normal delivery but before I left the house she began to complain of a severe headache. I prescribed some chloral and bromides for it. Soon afterward the nurse telephoned me that the patient was in convulsions, and upon returning I found the urine almost solid albumin. She was put in a pack and treated and she had only a single convulsion. Unless there is an absolute organic lesion of the kidney, I do not believe the patient should be aborted, although she had a history of eclampsia. The eco-

nomie side, spoken of by Dr. Gerson, is one of the most pathetic we have to deal with. The woman comes into your office poorly nourished, pale, nervous from having had to take care of five or six children and possibly a baby not yet a year old, with no chance to improve her condition. The husband working for possibly a dollar or two a day, the woman cannot have help to aid her. And she is pregnant. The humane side of such a case appeals to us. Yet I do not see that we have the right to interrupt pregnancy in such a case, unless possibly on the ground that for her to go on would mean to bring into the world a puny little child with practically no future for it. I do not know what would be right to do in such a case. I know what appeals to me and I have often been tempted to help such a poor woman. It is not for the money but for the humane feature. But we want to be above suspicion in this work. We cannot testify against the professional abortionists unless we, ourselves, do what is right. It is often difficult to decide what is the right thing to do.

Adjourned.

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BOOK REVIEWS

THE CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume III, Number II. Octavo of 213 pages, 55 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Published bi-monthly. Price per year: Paper, \$8; cloth, \$12.

The clinics of John B. Murphy have international renown. In the present number there is an opening article on "The Examination and Analysis of Cases," by the distinguished author. A committee in New York formed an organization for the purpose of determining how the out-patients in the New York hospitals were treated. They found that some 50 or 54 per cent. of the dispensary attending staffs were physicians who had offices in the neighborhood. Furthermore, they found in the course of their investigation that a large percentage of patients in the internal medicine department never had their outer garments unbuttoned when they presented themselves for diagnosis. They are now going to pay men to look after the free patients. The outdoor dispensary department in Chicago will be on a pay basis inside a few years. That means that the number of physicians who will be permitted to perfect themselves through dispensary service will be much smaller than now.

PROGRESSIVE MEDICINE. A quarterly digest of advances, discoveries and improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, *Materia Medica*, and Diagnosis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Hospital; one time Clinical Professor of Diseases of Children in the University of Pennsylvania; Member of the Association of American Physicians, etc.; assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia; Ophthalmologist to the Frederick Douglass Memorial Hospital; Instructor in Ophthalmology, Philadelphia Polyclinic Hospital and College for Graduates in Medicine. Volume II, June, 1914. Lea & Febiger, Philadelphia and New York, 1914. Six dollars per annum.

This quarterly, composed of important extracts from the recent literature, selected by leaders in the profession, is practically indispensable to the up-to-date physician. The extracts are sufficiently full for ordinary purposes. In the present volume, the literature on Hernia is extracted by William B. Coley; Surgery of the Abdomen, exclusive of hernia, by John C. A. Gerster; Gynecology, by John G. Clark; Diseases of the Blood, Diathetic and Metabolic Diseases, Diseases of the Thyroid Gland, Spleen, Nutrition, and the Lymphatic System, by Alfred Stengel, and Ophthalmology by Edward Jackson.

THE PRACTICAL MEDICINE SERIES COMPRISING TEN VOLUMES ON THE YEAR'S PROGRESS IN MEDICINE AND SURGERY. Under the General Editorial Charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Roger T. Vaughn, Ph.B., M.D.

Volume I, **GENERAL MEDICINE.** Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, A.M., M.D., Professor of Medicine, Illinois Post-Graduate Medical School.

Volume II, **GENERAL SURGERY.** Edited by John B. Murphy, A.M., M.D., LL.D., F.R.C.S. England (Hon.), F.A.C.S. President of the International Surgical Congress, London; Professor of Surgery in the Northwestern University; Attending Surgeon and Chief of Staff of Mercy Hospital and Columbus Hospital; Consulting Surgeon to Cook County Hospital and Alexian Brothers Hospital, Chicago.

Volume III, **THE EYE, EAR, NOSE AND THROAT.** Edited by Casey A. Wood, C.M., M.D., D.C.L.; Albert H. Andrews, M.D., William L. Ballenger, M.D. Series 1914.

The series is published primarily for the general practitioner, at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire. Price: Volume I, \$1.50; Volume II, \$1.50; Volume III, \$2.00. Price of the series of ten volumes, \$10.00. Chicago, The Year Book Publishers, 327 S. LaSalle Street.

These first three volumes of the new series maintain the high standard of the preceding series and will doubtless have fully as great prestige and popularity.

MISCELLANEOUS

CHORIOEPITHELIOMA.

The following abstract is taken from an article appearing in the International Journal of Surgery for July and August, written by Dr. C. B. Kinyon and condensed by him at our request:

This disease was first described by Sanger in 1888 and called by him sarcoma.

In 1895 it was proven by several investigators to be carcinoma, since which time it has been so considered by all writers.

True chorioepithelioma in women is composed of the epithelial coverings of the fetal villi. Therefore, it always follows pregnancy. The presence of syncytium and Langhan's cells are absolutely pathognomonic of the real chorioepithelioma. It may occur at any time during pregnancy, or it may first manifest itself during the first three or four months following labor. Metastatic bundles of chorionic epithelial cells, together with pieces of entire villi of the chorion, may be found anywhere in the system, but most frequently in the lungs. Over fifty per cent of all cases of this disease follow molar pregnancy.

Just outside of the syncytium and Langhan's cells that cover the fetal villi is a fibrin layer known as Nita-banch's fibrin layer. This layer, as a matter of fact, is the line of cleavage between the fetal and maternal tissues. While this fibrin layer remains intact, the epithelial cells of the fetal villi do not proliferate in the maternal tissues of the decidua; but when these fetal epithelial cells are over-stimulated by the toxic substance which they generate, the cells of the trophoblast proliferate in excess and these in turn generate more toxic material and more proliferation until they break down and penetrate the above mentioned fibrin layer. We then have established the typical characteristics of malignancy that are always present in chorioepithelioma.

The author refers in detail to the work of Dr. Edmund F. Smith, head of the Bureau of Plant Industry of the Department of Agriculture of the United States Government, as to the cause of cancer in plants. These facts are to be found in the Bulletins Nos. 213 and 255, published by the government. These investigations prove that parasites generate these toxic substances and are really the cause of cancer in plants. Dr. Kinyon, reasoning by analogy, claims that these same parasites may be the cause of chorioepithelioma, if not all cases of cancers.

The author gives in detail the signs, symptoms and course of this disease, but lays especial stress upon the character and the time of the discharge, and still more emphasis upon the value of careful microscopical examination of the tissues removed.

Under the head of treatment, the doctor insists upon a careful and very thorough curettage as soon as the discharge is at all suspicious and if the microscope reveals any signs whatever of malignancy he insists that radical operation, removing all of the uterus, tubes and the ovaries and every suspicious lymph node is the only hope of permanent cure.

He gives three cases, but the last one is of especial interest as the doctor performed the radical operation on March 5, 1913, and as yet (Nov. 1, 1913) there is no sign or symptom of recurrence.

Recurrence usually occurs within three months, and after six months there is reason to think that the cure is permanent. Of course, after one year all concerned will feel safe.

The article is accompanied with valuable photographs and is withal an important addition to our knowledge of this terribly destructive disease. Those interested can obtain reprints of the complete article by addressing the author, Dr. C. B. Kinyon, 914 Hill Street, Ann Arbor, Michigan.

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Paul DeWitt, M.D.,
Nashville, Tenn.

(Abstract from Nashville Journal of
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clamps approximate skin. Traumatism must be avoided.

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THE INTRA-CRANIAL TREATMENT OF GENERAL PARESIS.

BY EDWARD HUNTINGTON WILLIAMS, M.D., LOS ANGELES, CAL.

The discovery of the *Spirochaeta pallada* in the cerebral cortex of general paresis cases by Drs. Moore and Nagouchi removes the last vestige of doubt as to the exact cause of dementia paralytica. The discovery suggests that this hitherto hopeless disease ought to be amenable to the same forms of treatment as the other syphilitic infections, particularly in the early stages, before extensive destruction of the cortical substance has taken place.

Unfortunately the practical results do not attain the theoretical expectation when salvarsan is administered intravenously in the usual manner: the spirochetes in the cortical substance are apparently beyond the reach of the arsenical fluid. So that intravenous, and even interspinous, methods of administration have been most disappointing in treating these cases. The cell count is frequently reduced, but thus far no permanent improvement in the mental symptoms has been observed.

The experiments of Mott, in London, of injecting Tripan blue into the sub-arachnoid space of the spinal canal by

lumbar puncture, indicates why such injections are ineffective in paresis. For these experiments demonstrate that the effects of the staining fluid were progressively diminished from the point of puncture upward, very little fluid reaching the upper part of the cord, and none whatever entering the ventricles, or staining the cerebellum, or cerebral hemispheres. It is evident, therefore, that if the spirochetes which cause paresis are to be attacked with any form of serum it must be through a much more direct route than that of the general circulation, or the spinal fluid.

Recently Drs. Guy Payne and Wardner of the Overbrook Hospital for the Insane, at Spring Grove, N. J., and Dr. Martland, of the Newark City Hospital, tried the experiment of injecting carbon fuchsin post mortem subdurally through a trephine hole bored in the frontal region. This experiment demonstrated that the coloring fluid spread itself over the anterior portion of the hemisphere in which the injection was made, reaching back to a point just

posterior to the fissure of Rolando. But, as would be expected, the fluid did not cross to the opposite hemisphere.

In view of the fact that the fluid spread over the frontal areas of the cerebrum which are the ones usually involved in paresis, Drs. Payne and Wardner undertook the treatment of some cases of paresis by the injection of a salvarsanized serum subdurally directly over the affected area in the brain. The preparation of the fluid was carried out in accordance with the Swift and Ellis technique, as follows: "On the day previous to operation the patient is given an intra-venous injection of neosalvarsan .9 gms. One hour later about six ounces of blood are drawn from the median basilic vein. This blood is set aside to clot at room temperature for three hours, and then put in the ice box at a temperature approximating 50° until the following day. The clear supernating fluid is then poured off, centrifuged and mixed with its own bulk of normal saline solution. It is then heated to 56°C. for ½ hour, and again placed in the ice box until ready for use.

"The patient is prepared for operation and given an anesthetic. A trephine hole is then bored as nearly as possible over the precentral gyrus. As soon as the dura is exposed a lumbar puncture is performed, and about 20 c.c. of spinal fluid abstracted. The dura is, as a rule, found rather tense, and enough fluid is abstracted to relieve the tension and allow the respiratory fluctuations of the dura to be plainly seen. When this effect is accomplished the needle is inserted through the dura, and 30 c.c. of the previously prepared mixture allowed to flow in by gravity.

"The apparatus used is an all-glass 30 c.c. Luer syringe with rubber tubing about 18 inches in length attached, and an ordinary small calibre salvarsan needle bent upon itself at an angle a little less than a right angle, about ¼ in. or less from the point. After some

experience with the cadaver and living subjects we find that an opening not less than 2 c.m. in diameter, with the above mentioned needle, the opening of which faces downward, is perfectly satisfactory. If the above conditions are complied with the fluid invariably flows in readily as far as our experience goes."

This is Drs. Payne and Wardner's description of the technique used in six cases of paresis at the Overbrook Hospital at the time of making their first preliminary report. In referring to to these cases later the physicians say: "One has shown a practically complete remission; a second has a remission with some deterioration; a third, in about a week, has shown very marked improvement; two others have shown good improvement; and a sixth, who is a case of taboparesis with 4 plus Wassermann in spinal fluid and normal cell count with plus globulin who has shown no change during a year's observation either clinically or from a laboratory point of view, was probably a stationary case before treatment."

The cases were not specially selected ones, as I know from personal observation, but were taken at random from those in the hospital whose friends could be induced to give permission for the operation. Some of them, like the taboparetic case, were obviously in an advanced stage of mental deterioration. Indeed, there was only one of the entire group that could be considered of recent development, and therefore in the least hopeful. And it seems significant that this is the one case referred to as showing "a practically complete remission."

The completeness of this remission is shown by the fact that just previous to the operation the patient was excited and destructive, disorientated as to time and place, his memory for recent events and more remote ones was completely at fault, and he had no insight whatever as to his mental condition.

He expressed the typical paretic's general satisfaction with himself, and the characteristic expansive delusions, believing that he possessed great wealth, owned "fifty automobiles," and several important commercial enterprises. Yet by April 2nd, ten days after the first intra-cranial injection of the serum, his delusions had completely disappeared, his memory was good, and he was to all intents and purposes a normal man mentally. He remembered his former expansive delusions, and recognized that he "must have been crazy" to believe them—a condition rarely, if ever, seen in the ordinary remittent stages of paresis.

Some important physical symptoms still remained unchanged, however. His spinal fluid still gave a 4 plus Wassermann, the pupils immobile to light, and the patellar reflexes slightly exaggerated. But the tongue and lip tremors, and the defective speech phenomena, had completely disappeared.

The other cases, with the exception of the taboparetic one, all showed distinct improvement, apparently in direct proportion to the amount of normal cortical substance remaining at the time of operation. This is certainly all that could be expected theoretically, as of course there could be no hope of restoring cortical substance that had been actually destroyed. But the fact that this progressive destruction seemed to be arrested, suggests the possibility that in the early stages of the disease, before any very great destruction has taken place, practical recovery of normal mental functions may be restored—as in the case of the patient who shows, temporarily at least, "complete remission."

It was pointed out a moment ago that the experiments upon the cadaver indicate that fluid injected over one hemisphere does not reach the hemisphere on the opposite side. For this reason the physicians at the Overbrook Hospital make it a practice to give two

separate injections, one over each hemisphere, and at intervals of about two weeks. In every instance but that of the taboparetic, however, improvement in the patient's mental condition was apparent very soon after the first operation, and before the second one had been performed.

This, and the fact that an opening is made in the skull and fluid removed from the spinal canal, at once suggests that possibly the relief of intracranial pressure, rather than the injection of serum, may have been responsible for the improvement. This assumption, however, seems to be disproved by an incident that occurred during one of these intracranial operations. In this particular operation, after the aperture had been made in the skull and 20 c.c. of spinal fluid removed, the serum-injecting apparatus failed to work, so that none of the fluid was injected subdurally, or at most only a few drops. As a result the operation had to be postponed.

Here was a case in which the cerebral pressure was lowered by the withdrawal of fluid as well as by the opening in the skull; so that, if relief of tension were alone responsible for the improvement in mental symptoms, this patient should have shown the same improvement as the others. But in point of fact he showed no improvement whatever. Yet two weeks later when the serum was successfully injected, his mental symptoms improved in a few days.

As yet it is altogether too soon to consider this intracranial method of treating paresis as anything more than an experiment—with possibilities. It is, however, an experiment based on known pathology, and along lines clearly indicated by recent scientific discoveries. The usual objection that it involves a serious operation should not deter other surgeons from attempting it, since the condition for which the operation is performed is uniformly fatal, and not responsive to any other

known form of treatment. For this reason there is ample justification for trying this intracranial treatment, even though there may be far less justification in resorting to similar radical measures in other syphilitic infections such as tabes. For tabetic patients frequently live long and useful lives, and are often capable of attending to their work and able to get much enjoyment out of life, even when almost completely incapacitated physically. Moreover, there is always the hope and possibility that the progress of the disease will be self-limited, either with or without treatment.

But the case is utterly different with paresis. The disease is never self-limited, is not amenable to any known

form of treatment, and even in the early stages renders the victim a helpless incumbrance. In short, no disease is more hopeless, or more distressing in its general aspects. For this reason almost any hopeful form of treatment, even one involving enormous risks, would be justified. Experience shows, however, that the intracranial method just described presents no such degree of danger. And considering the encouraging results that have been obtained thus far at Overbrook, this treatment is worth giving a trial. If successful even in a low percentage of cases, it will be a mile-stone—the first definite marker—in the treatment of this form of insanity.

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A NEW CURE FOR DIABETES AND OTHER DISEASES DUE TO OVEREATING.

BY BOARDMAN REED, M.D., ALHAMBRA, CAL.

Diabetes Mellitus was long considered to be virtually incurable. In my general practice days many cases of it were under treatment and most of them proved refractory because they could not or would not give up sweets and an excess of starch. Those who adhered rigidly to the antidiabetic diet and refrained also from alcoholic beverages, generally recovered. One old lady aged 63 years who had always indulged excessively in sweets and rich complicated dishes, had been told by her Homeopathic doctor that her trouble was neurasthenia due to her age and that a cure was not to be expected. She promptly improved on the restricted antidiabetic diet with some help from a mild alkaline water and was free from sugar or other diabetic symptoms for many months till she returned to her former generous living habits, when there was a relapse followed by penitence and reform again. Her cure afterward became complete

and she lived to the age of 82, dying suddenly at last of apoplexy which resulted from arteriosclerosis, another usual consequence of the almost universally prevalent habit of overeating with deficient mastication, little or no exercise and the inevitably resulting chronic fermentation.

But I was led to write this article by a forceful contribution to the *Philadelphia Medical World* from one of our Pacific Coast physicians, Dr. J. L. Hill of Albany, Oregon, who is evidently both a thinker and a careful observer. He has been curing his diabetic cases by requiring an absolute fast—except from water—for three or four days preceded by a free purgation and followed by a gradual resumption of a simple diet from which everything very fermentable is excluded. This procedure is repeated every three or four weeks while care is taken that the bowels remain open between times. His article was published in the June num-

ber of the **World** while in the July number of the same there appeared a communication from a Philadelphia physician, Dr. B. R. Marsden, in which he states that Dr. G. Guelpa of Paris, France, had presented before the British Medical Association in 1910 a paper entitled "Starvation and Purgation in the Relief of Disease." This was published in the **British Medical Journal** of October 8, 1910. Dr. Guelpa, it seems, has since written a book entitled "Autointoxication and Disintoxication," an English edition of which was issued by the Rebman Company, N. Y., and a later edition of it in French came out last year in Paris.

Nearly every number of the leading medical journals now contains testimony from some experienced physician to the harmful results of overeating. The medical profession is apparently awakening to the fact which was long ago recognized by many of us, that a very large proportion of the more prevalent diseases are attributable directly or indirectly to dietetic faults and mainly to overindulgence in food—to overloading and overworking the digestive and excretory organs. Many of us have had this fact forcibly impressed upon us not only by experience with our patients, but also with our own families and ourselves.

This truth being accepted it should be clear even to the dullest of us that the simplest and surest way to cure these results of repletion is to take the opposite track, let the patients thus afflicted be placed on a restricted diet, undergo an occasional short fast and be further unloaded by purgation when necessary in the worst cases.

There is scarcely an organ in the body which will not succumb in time to a persistent overloading of the gastrointestinal tract even with simple digestible food, to say nothing of the unscientific and indigestible conglomerations which are crowded into their stomachs three or four times a day by

a majority of well-to-do people today in most civilized countries. The stomach, bowels and liver are the first to suffer from their constant overwork. Then, after the digestion has been almost destroyed and excretion through the kidneys, intestines and skin has become impaired, the blood is impoverished and poisoned by autointoxication. Then the heart, arteries, brain, nervous system, skin, mucous membranes and everything—all the organs and tissues which depend upon the blood for their nourishment—begin to fail and death gradually approaches, when it does not come suddenly through apoplexy or heart failure.

It should hardly be necessary to enlarge on so simple and manifest a lesson. The fatal result often comes in infancy or childhood when our fashionable women refuse to nurse their babies or wean them too early—those of them who will consent to bear children at all. Otherwise the victims break down in youth or in middle life or at the limit of three score years and ten when, provided they have a fairly good inheritance and have lived hygienically, they should be at about their best.

Dr. Hill in discussing diabetes says very truly:

"As far back as history gives a record, diabetes has had a place as one of the scourges of civilized people, and as civilization advances and luxuries of diet become easier of attainment to all classes, the disease becomes more frequent. It is met in all classes but is essentially a disease of those in easy circumstances who are good liver. It is very frequent in heavy beer drinkers, in obese persons, those of sedentary habits and omnivorous gourmands of all classes."

Here follows the doctor's pithy summary of the etiology, pathology and the remedy: "What is the cure? Remove the cause and the cure is made. The cause is fermentation. The cause of fermentation is overeating. The cure

for fermentation is: quit eating and fermentation will cease. Remove every particle of ferment from the alimentary canal that might become a nidus for future culture of bacteria and the cure is complete but may return at any time if indulgence in original cause is permitted.'

I am decidedly opposed to the habitual dependence on purgative or laxative drugs to maintain regularity of the alvine evacuations because in ordinary cases of constipation there are more useful and promising as well as far safer methods when the trouble has not been permitted to go on too long; but as regards the overfed high livers before their hearts and vitality generally have begun to fail seriously, the method favored by Dr. Hill and Dr. Guelpa will doubtless accomplish more than any other for the cure not only of diabetes, obesity and the earlier

stages of arteriosclerosis but also, when modified and mitigated somewhat in the less serious cases, for a host of other ailments attributable to a like cause—rheumatism, eczema, most forms of indigestion and of liver and kidney diseases, gout, gouty bronchitis, many neuralgias, etc.

Nor is it safe in dieting diabetics to let them make up for what they are not allowed to eat of sugar and starch by gormandizing on flesh foods or a very excessive proportion of proteids of any kind, since the meats especially when taken in excess and to a less degree a very disproportionate amount of any proteids are capable of doing still more mischief. Such patients as well as all others who would have health and long life should learn the lesson of self-denial and practice moderation in the total amount of food taken.

REPORT OF CASES TREATED WITH RHEUMATISM PHYLACOGEN.

BY A. A. STAFFORD, M.D., ALAMEDA, CAL.

If one accepts the theory that rheumatism is due to an infection, caused primarily by a special micro-organism, the modified bacterial derivatives cannot but appeal to one's reason as being the most logical preparation to stimulate the defensive antibodies and resisting powers of the individual. Rheumatism Phylacogen has, at least in my hands, so far excelled any former known method of treating inflammatory rheumatism that until I am shown something better I shall continue its use. I have not used this class of preparation in gonorrheal rheumatism or in rheumatoid arthritis and therefore am not convinced that it is indicated in these diseases, but believe that in the latter disease* it might afford relief if not cure.

Rheumatism Phylacogen shows its most magical action in very acute

cases of short duration. In subacute cases of longer duration it promptly relieves the pain and tenderness of the joints, but the stiffness, due to long continued inflammation and joint fixation, clears up more slowly and requires continued injections, massage, and passive motion. This treatment will, however, give wonderful results compared to all former known medical treatment.

Before beginning the administration of phylacogen in any case I examine the urine for albumen and casts. If I should find a nephritis, that might cause some hesitation in using the remedy. Before beginning treatment, too, it is wise, I find, to assure the patient or friends that the injections may be followed by some unpleasant symptoms, such as chills, nausea, palpitation of the heart, and high temperature followed by sweats,

all of which are only temporary, and not to be regarded with alarm.

All of my cases have been treated by subcutaneous injection, using a 10 c.c. glass syringe with a rather small caliber needle and making the injection under the skin of the back between and below the scapulae and in some cases in the buttocks or in the abdominal walls.

My usual primary dose for young children is 1 c.c.; for children over ten and adults 2 c.c. subcutaneously. This dose as a rule is sufficient and should be increased gradually from day to day as the case seems to warrant. Originally I used much larger doses than I do at the present time. In some of my later cases I have not given at any time a larger dose than 3 c.c. subcutaneously, except in chronic cases. This, of course, was in cases which responded well to the treatment. The question of dose and interval between doses is one for which no exact rule can be made, but must be left largely to the judgment of the physician in each individual case, which must be treated on its own merits. The physician must thoroughly understand the remedy and that it is intended to act by stimulating the formation of antibodies in the patient, and he must estimate in each case about what is to be expected, then watch the reaction obtained before giving the subsequent dose. As a rule only a moderate or mild reaction in the way of chill, fever, nausea, etc., is desired.

Doses are usually given daily for the first three days, then on alternate days for three to five doses, then every three to six days as long as any stiffness of the joints remains. Of course, there are variations from this general working plan depending on the severity and duration of the reactions and on the progress of the disease. While giving Rheumatism Phylacogen I give no other internal remedies, but see to it that the patient's bowels are kept ac-

tive, and that he partakes of as much wholesome food of all kinds as can be digested and assimilated. Daily warm baths also relieve the skin of some of the toxic products that are eliminated by the perspiration, which is a rather desirable part of the constitutional reaction and usually occurs in the cases which respond ideally to this treatment.

I have used a great deal of phylacogen since the preparation was first introduced, having treated by now over fifty cases, and I have had no absolute failure in any case. In reporting the following cases I may say that all of the patients were in private practice, where it was possible to keep them under close observation, and not only see the results during and immediately following the treatment, but to note conditions for weeks and months thereafter. Those cases reported cured mean that all symptoms had left the patient and have not recurred to the present date, July 5th, 1914.

Case 1. March 15, 1912. Miss Helenita B.; aged 17, high school girl, had tonsilitis in January followed by inflammatory rheumatism which, under good medical treatment, has lasted until now and involves nearly all the large joints of the body and the endocardium as well. A very sick patient temperature 103, pulse rapid and weak. On this date I gave her 5 c.c. Rheumatism Phylacogen. Daily injections of 8 c.c. were given for five days, then 8 c.c. on alternate days until March 28th, when she was entirely free from all rheumatic symptoms. The endocardial valvular murmurs had disappeared and she has remained well to this date.

Case 2. Annie P., Italian girl, aged 11, was never sick until May 1st, 1912, when she had tonsilitis followed by an attack of inflammatory rheumatism, beginning May 8th. May 10th I found this patient's ankles, wrists and shoulders swollen, red, and very painful; temperature 102. Five daily injections of 5 c.c. stopped all symptoms of rheu-

matism. Three more injections of 5 c.c. were given on alternate days and the patient was discharged cured and she has had no return of the disease to date.

Case 3. 3/27/1912. Mrs. C. L., aged 33, with nursing baby eight months old, contracted influenza one month ago, followed by rheumatism which involved the articulations of the cervical vertebrae and the joints of all the limbs. Patient had been under medical treatment but was in a helpless condition, not being able to turn over in bed. Rheumatism Phylacogen was given in seven daily injections of $7\frac{1}{2}$ c.c. each, and the patient was then free from pain but somewhat stiff in the joints—this was April 4th. That day she received 10 c.c. of the phylacogen, and the same dose every third day until April 10th, when she was able to leave her bed and go out of doors, free from pain, swelling and stiffness. I gave her 10 c.c. on April 15th, 20th and 25th, at my office, and discharged her. She has continued well until present date, July 1st, 1914. Of special interest in this case was the fact that the patient continued to nurse her baby throughout the course of phylacogen treatment.

Case 4. Mrs. A. P. T., aged 34, had a long, severe attack of rheumatism three years ago, was confined to bed then for three months and was an invalid for two months longer. On March 26, 1912, she had rheumatism in ankles, knees, and wrists of a week's duration, following sore throat three weeks ago. Temperature at this time 101, heart normal, urine normal. She was given 6 c.c. Rheumatism Phylacogen daily March 26th to April 1st inclusive, and was then entirely well. I gave her another 6 c.c. on April 3rd and on April 5th. She has remained well to the present time, May 1st, 1914, when she was last heard from, having moved out into the country.

Case 5. March 18, 1912. Mrs. L. E. B., aged 56, widow. Has had inflamma-

tory rheumatism several times in her life. Has now been suffering since February 1st, and is very sick and helpless. Heart normal, temperature 103, general appearance bad. I gave her 10 c.c. Rheumatism Phylacogen, followed by very severe reaction. This dose was repeated daily for six days with strong reactions following each dose. At the end of this course of doses the patient was quite free from rheumatic pains, redness and swelling—but very stiff. Treatment was suspended for three days, when she felt very well. I then gave her 6 c.c. and got a moderate reaction. She was then given 6 c.c. at her home every third day until April 1st, when nearly all stiffness was gone except in one wrist. 5 c.c. were given every fifth day at my office until April 25th, when she went to the country feeling well and wrote me June 1st, 1912, that she had continued well. When last heard from in latter part of May, 1914, was well and feeling fine.

The foregoing five case records illustrate the plan of dosage used in the earlier cases and give a very good idea of the permanence of cure.

The following four case records show the plan of dosage now used and bring out other points of importance in applying this treatment.

Case 6. Holger C., aged 10, school-boy, has had cold for two weeks and rheumatism in all joints for last few days, temperature 100, heart normal, tonsils medium large; this is his primary attack. May 4, 1914, the day first seen gave him 2 c.c. Rheumatism Phylacogen subcutaneously; this was repeated on the 5th, 6th and 7th, the local and systemic reactions being very moderate. He was then improved sufficiently to come to the office for treatment. May 8th and 9th he received 3 c.c. subcutaneously at my office, but relapsed. May 10th, 11th, 12th, 14th, 16th and 18th I gave him 3 c.c. subcutaneously when he was again well

enough to come to the office. May 20, 22, 23, 25, 28, 30, and June 1st, he received 3 c.c. at my office. On the last date I discharged him entirely free from any symptoms and he has remained well ever since. I was unable to account for the relapse until on May 25th I learned from a neighbor that the boy had been out playing baseball all afternoon on May 8th and 9th, two days when his mother had to leave him alone at home. The relapse accounts for the extra number of doses. I have noticed before that cases that relapse even slightly require more and larger doses. In this case I was restrained from increasing the dose because I wished to avoid reactions which would scare the boy and necessitate a discontinuance of phylacogen. The local reactions were not sufficient to cause complaint and the constitutional effects consisted of a slight rise of temperature and moderate sweats, the latter I am always glad to see. No adjunct treatment was given except a mild saline laxative to insure bowel action.

Case 7. Mrs F. J. H., aged 36, housewife. December 29, 1913, has had pain in the joints for four days. Both ankles and wrists painful, red and swollen, temperature 101, heart normal. This is the first attack of this kind she has ever had. On this day I gave her 3 c.c. Rheumatism Phylacogen subcutaneously. December 30, January 1, and January 2, 1914, she received the same dose. January 2nd in the afternoon she was able to be out of bed. January 3rd and 5th she was given 3 c.c. subcutaneously, after which I discontinued the phylacogen and discharged her January 6th entirely well, and she has continued free from symptoms ever since. The local reactions in this case were very moderate and the constitutional reaction consisted of a slight malaise followed by free sweating for the first two doses and after

that only the sweating. This patient received no other treatment.

Case 8. Mr. W. H., aged 34, carpenter. January 10, 1914, complains of pain in all of the large joints of the body—the wrists, ankles, and knees are red and swollen, temperature 102.6. There is a marked friction sound over the cardiac area which can be heard two inches away from the chest wall. Patient very much depressed and pessimistic as he has had five or six similar attacks in previous years and on every occasion was laid up in bed for two or three months and incapacitated for the balance of five or six months. This patient was thoroughly distressed and really a seriously sick man—this is the type of case which we have all seen go bad quickly in spite of our very best efforts. January 10, 1914, I gave him 2 c.c. Rheumatism Phylacogen subcutaneously. January 11th, 3 c.c., January 12th, 5 c.c.; this last dose was repeated January 13, 14, 15, 16, 17, 18, 19 and 20th. On this last date the cardiac condition seemed entirely normal, long before this, however, the man had been relieved of pain, and the swelling and redness had disappeared.

The reactions with the first few doses were rather strong and the sweating rather profuse, however I continued the 5 c.c. dose because I wished to thoroughly immunize and entirely wipe out the cardiac condition. On account of the cardiac condition I kept this patient in bed throughout the course of treatment and long after he wanted to get up. Absolutely no other treatment was given, not even ice to the chest. January 23, and 27th he received 5 c.c., and was then discharged cured, a happy and well pleased patient. I consider this a remarkable result, and an especially interesting one because this patient gave a history of previous attacks of gonorrheal urethritis, the last in August, 1913, which was, however, apparently completely cured after six weeks' medical treatment—ordinarily

one would have been justified in considering the Neisser infection of some etiological import in a case of this kind, and on this basis elected to give Gonorrhea Phylacogen instead of Rheumatism Phylacogen—but for the reason that the history of this patient showed that he had had at least one of his previous attacks before he ever had gonorrhea, and my unlimited faith in the Rheumatism Phylacogen, I started off with the latter knowing I could change to or add the gonorrhea preparation at any time I became convinced that I was not getting a full measure of result.

Case 9. Mrs. Jeanette T., aged 72, widow, housewife. August 22, 1913, comes from up the state quite a distance to be treated for what she calls rheumatism. Complains that for past year and a half she has been having pain in the joints followed by stiffening, walks with a cane and much stooped forward. For the past four months has been bothered steadily with pain in shoulders, hips and back. Left shoulder and thumb red, swollen and tender. Other joints which are not painful at this time are quite stiff. Heart normal, urine negative. Patient has been variously treated by different doctors with no improvement. Diagnosis—Chronic arthritis. In patients of this age one has no right to expect results such as are obtainable in young adults and I was accordingly very conservative in telling the patient what she might expect from this treatment—however since she came expressly for the phylacogen treatment I decided to give it. After a couple days' rest and a few doses of salines she received the following course of injections of Rheumatism Phylacogen, subcutaneously:

August 25, '13, 2 c.c., 27, '13, 3 c.c., 29, '13, 3 c.c.

September 2, '13, 4 c.c., 4, '13, 3 c.c., 6, '13, 5 c.c.

September 9, '13, 3 c.c., 11, '13, 4 c.c., 13, '13, 4 c.c.

September 16, '13, 2 c.c., 18, '13, 4 c.c., 20, '13, 4 c.c.

September 22, '13, 5 c.c., 25, '13, 4 c.c., 27, '13, 4 c.c.

On these she had very mild local reactions and, except on one or two of the larger doses, moderate systemic reaction. She improved considerably and on September 28, '13, left for her home feeling much better—she had no pain, the swollen joints were down, and she had markedly less stiffness—she was well pleased. I explained to her that I did not consider her cured and that she might have a return of her trouble but she declared she was so much better that she felt she could now get along. December 24, '13, she returned completely relapsed and in about the same condition as when I first saw her. I again examined her carefully, put her on 2 minims Potassium Arsenit. t. i. d. and gave her the following doses of Rheumatism Phylacogen subcutaneously:

December 24, '13, 1 c.c., 27, '13, 3 c.c., January 1, '14, 3 c.c.

January 3, '14, 3 c.c., 5, '14, 3 c.c., 7, '14, 3 c.c., 8, '14, 3 c.c.

January 10, '14, 3 c.c., 12, '14, 3 c.c., 14, '14, 3 c.c., 16, '14, 3 c.c.

January 19, '14, 3 c.c., 27, '14, 3 c.c., 31, '14, 5 c.c., February 4, '14, 5 c.c., 7, '14, 5 c.c., 12, '14, 5 c.c., 17, '14, 5 c.c.

She improved steadily during this course of injections—the reactions from the phylacogen were mild. She took the Potass. Arsenit. until January 10th, after which I put her on Taka-Diastase 5 grains t. i. d., because she seemed to have difficulty in digesting starches. This she took until February 24th, 1914. I then put her on Emuls. Ol. Morr. cum Hypophosphit. which she took until March 11, '14, on which date I discharged her. From February 17, '14, the date of her last injection of phylacogen, she continued free of all symptoms, had no pain, had very little

stiffness, could walk much better and more erect and her general health was decidedly improved. In a letter which I received from her June 22, '14, she stated that she was just as well as when she left for her home March 11, '14. In this case I feel that the results justified the use of the phylacogen—most certainly the patient felt amply repaid. This case illustrates the good which can be accomplished by moderate doses at intervals of forty-eight hours and longer, indeed considering the age of the patient one could not expect an effective response to the therapeutic agent oftener than once in forty-eight to seventy-two hours without tiring out the patient and using up completely her reserve vitality. The adjuvant treatment given in this case was in my judgment indicated and I believe it did some good—but I am quite convinced that the end results in this case would not have been possible without the phylacogen.

The above case records were selected because they are of the type usually met and they illustrate the points on size and interval of dosage, young and old patients, quick and slow result, acute and chronic condition, uninterrupted cure and relapse, and practicability of application in private and office practice. Except in case No. 8, I have not given details of previous history because there was nothing important to record. Previous history, carefully taken, is of great value in applying these remedies.

Conclusion: In giving phylacogen subcutaneously one should use a $1\frac{1}{4}$ or $1\frac{1}{2}$ inch needle attached to a 10 c.c. all glass syringe. The doses should be re-

peated every twenty-four hours until all acute symptoms, especially pain, have subsided, after which forty-eight hour intervals are effective in completing a cure in the average case. When a patient shows symptoms of being tired and nervous with poor appetite, the intervals may be extended to forty-eight or seventy-two hours, or even four or five days, when necessary—this, in the writer's opinion, is much better than reducing the dose. The return of pain during an interval of treatment indicates that the dose has been insufficient and that treatment should be continued at a shorter interval.

The cardiac symptoms, when present, usually improve and disappear with the other rheumatic symptoms.

In acute cases, presenting primary attacks, the symptoms clear up promptly and completely.

In cases of long standing, with a history of previous attacks, there is usually some stiffness remaining after all pain, redness and swelling have disappeared, which leads me to believe that joint changes, with deposits and ankylosis, begin much earlier than has heretofore been believed. Phylacogen cannot be expected to overcome this condition, but mild mechanical treatment with active and passive motion, and massage is indicated.

The only adjuvant treatment that I use routinely is free elimination by the skin and bowels, and full diet of plain nourishing food. Occasionally iron or arsenic as a tonic is indicated, but for the most part I have not found this necessary until after the acute symptoms have subsided.

1915 Santa Clara Avenue.

DRUG ADMINISTRATION.

BY GEORGE L. SERVOS, M.D., GARDNERVILLE, NEVADA.

Not long since, I read an article in which the writer said, in his obstetrical cases in particular, he preferred untrained to trained nurse service. He

said the untrained assistant did just what she was told to do, and no more, while the trained nurse very frequently took much responsibility on

her own shoulders. I have found, in my practice, while in a mining camp, far removed from the trained nurse, that the same condition obtained.

It has been the idea, and for some time, that we must have a trained nurse on every case, in that administration of remedies and other matters in connection with the case might be given exact and proper attention. We have seemingly concluded that no person, other than one who has gone through training, can properly administer a single remedy. I have found the reverse to be true.

In the handling of untrained service the doctor must, per force, give closer attention to his cases. He must instruct his assistants, either by word of mouth or by written orders, and in such a manner that they will thoroughly understand him, and he must act in such manner, at all times, as not to arouse any slight sense of panic on the part of either his assistant or others interested in his case.

If a trained nurse were on the case a chart would be kept, with records of temperatures, pulse rates and other data relative to the condition of the patient. When an untrained nurse is in attendance the chart is very frequently an unknown quantity, as the sensible doctor will not permit the use of the thermometer by such a person, as nothing is more inducive to panic than a raise in temperature, even a slight one. The pulse, in the face of a fever, is a much better indicator for the untrained nurse to follow, as the heart rate usually corresponds to the temperature, and the pulse under certain control assures both nurse and doctor that all is well.

I do not believe that it is necessary that the average patient be worried with the use of the thermometer at frequent intervals. If the temperature is taken at the time of the doctor's visit, morning and evening, I believe that is all that is really necessary.

And then we are disregarding the symptom of fever to some extent, as this seems a necessary factor, looking to the increased leucocytosis and formation of antibodies in many of the infections, and if controlled to too great an extent we may do as much harm as good.

When I go on a case in which I am not to have trained help, my first act is to find who is to give the patient care and such person I educate to take the pulse rate properly. I show them the location of the radial artery and after taking the pulse rate at intervals and for times of fifteen seconds, half minutes and full minutes, I have my helper do likewise and announce his or her findings to me. I again take the pulse myself and have the attendant make like repetition. During the first day or two, at each visit, the pulse is first taken by the nurse and then by myself, and our findings compared. I have found, in following such plan of action, that even one who has never taken a pulse previously becomes expert within a very short time.

In the control of fever I employ either aconitine or veratrine, or combinations of these agents with digitalin and strychnine. At the morning call I usually leave a sufficient amount of the indicated remedy to carry the patient to the next time of observation. If, as in pneumonia, I find a pulse of one hundred or over per minute, I instruct the attendant to administer the small individual doses at half-hour intervals until the pulse rate drops to between eighty and ninety per minute, and then extend the intervals to an hour or more between doses. For the first two or three days, in order that I may be satisfied that all is working well with the case, I make it a practice of making a call of observation at about the hour when I feel sure the drug or drugs should have become effective, but thereafter I have found the nurse able to make her observations properly and

to meet the indications. I also instruct her, in event the pulse increases in frequency, to shorten the intervals between doses. I pursue such course in practically all of the acute infections. I do not, however, tell her that the increased pulse rate may mean a very decided increase in temperature, but simply say that I desire to keep the pulse down if possible. Not having a thermometer and being able to take and read the temperature from time to time, the increased pulse rate does not cause a panic. And I rarely, if ever, make known my temperature readings, either to nurse, patient or others interested in the case.

Given a case of typhoid fever and an untrained nurse, I first instruct her as to how to look to both her own and the toilet of the patient—how best to practice prophylaxis. In the handling of the fever, the pulse is again the indicator for the nurse. If the antiseptic plan of treatment is followed, I instruct the nurse to administer the sulphocarbolates until such time as the bowel actions become normal in consistency and practically odorless, and then at such intervals as may be required to maintain such effect.

I make it a point never to advise the nurse of this character as to what drug or drugs I am employing and for the reason that most of our people have some idea of the actions of all drugs and that we not infrequently find either the nurse refusing to administer or the patient to take some drug for the reason that such agent has been given a bad name for one cause or another. Very recently, in a story in one of the monthly magazines, aconitine was pronounced so poisonous as to lead one, not posted in drug action, to believe that this particular drug never was, and should not be employed in the treatment of the sick. Consequently all that is required, as to knowledge on the part of the nurse, is that she may know what to anticipate in the way of

drug effect from any and all agents employed.

Many people believe that disaster invariably follows in the wake of calomel. If there is not salivation, "mercury at least gets in the bones." Consequently, when working with an untrained assistant, and desirous of employing the mild chloride of mercury, I administer the agent in small and repeated doses, with podophyllin or some other synergist, and without remarks as to any particular care, other than has previously been ordered, as to diet. My entire dosage rarely exceeds two grains and I have found that the patient may eat and drink anything with-in reason, as indicated in the particular condition under observation, and not suffer therefrom. My only suggestion to the attendant is that she may look for increased bowel action in from six to ten hours. It has been many years since I have told the patient, to whom I have administered calomel in small dosage, that he must take care not to eat of that which is sour, and during that time I have not seen a single case in which any untoward drug effect followed. If I order a restriction of diet it is done because of the indications existing other than that of drug administration. I have found that the untrained assistant, not knowing that calomel is being administered, follows instructions to the letter.

Never, under any circumstances, do I allow the use of the hypodermic by an untrained nurse. If any of the hypodermic remedies, as morphine, hyoscine, digitalin, pilocarpine, sparteine, strychnine, lobeline or other agents of this class are indicated, I endeavor to make the administrations in person, if possible. Nor do I, if it can be avoided, allow a trained nurse the use of the hypodermic, excepting in emergencies, and then only after receiving instructions from me. I believe that, while the hypodermic route of drug exhibition, wherever possible, is the prefer-

able one, the syringe should not be employed indiscriminately and by the assistant, be she trained or untrained. More harm than good has been done by this method of drug exhibition.

As the untrained assistant knows nothing of drugs, other than that which you tell her, it is possible to place in her hands, for administration, many of our most potent agents. I have done this without the least fear as to the ultimate outcome, as the nurse has always received instructions as to subsequent action on her part following noted effect of the agent employed. I have never seen an incidence of over-dosage in a single case and I have placed drugs like hyoscyne, coniine, aconitine, veratrine, morphine, gelseminine, strychnine, atropine, chloral, colchicine, digitalin, and other very potent agents in such hands for administration with as much ease of mind as when left in charge of a trained nurse. In fact, my ease of mind has been greater in the former than in the latter instances. The untrained nurse, knowing nothing of drug action, other than is told her by the doctor, goes ahead with the medicine until the effect suggested is apparent, and then follows the orders of the physician to the letter. The trained nurse, knowing more or less (frequently less), about drugs and their actions and knowing that she is handling potent agents, not infrequently stops short of the desired effect and for the simple reason that she is fearful of ultimate results, which might follow were over-dosage to occur. I have frequently seen a slight knowledge of drug effect work greater harm than the absolute lack of wisdom thereof.

I am not saying that we should not work with trained assistants when they may be had, but I do insist that a properly instructed, untrained person, will do good work on practically any case, be it medical, surgical or obstetrical. The handling of an untrained assistant

means, and that very frequently, that the doctor will give his patient closer attention and that in turn not infrequently means better treatment of the latter. With a trained nurse on the case, sad to tell in many instances, much is left to her discretion, and very frequently she is not discreet. She may not tell the patient what drug, or drugs, are being employed, but in many instances she gives this information to the family, telling them much which they should not know. She may do many things on her own responsibility, things better left undone, and which the untrained never, or seldom, do, or even attempt.

I believe that too much stress is given to the potency of the majority of our drug agents. The disasters follow too large doses. If the method of small dose, frequently repeated to therapeutic effect and the latter maintained through the lengthening of interval between doses, rather than the decrease of the individual amounts exhibited, it is my opinion that any drug, no matter how potent, may be placed in the hands of the well instructed untrained nurse with as much ease of mind as when given to the trained assistant for administration. Under such method, no single dose of the agent employed is, as a rule, sufficient to bring about disaster, and as the pronounced physiologic effect is rarely reached, even the combined doses will cause but little, if any, harm. We will admit that aconitine is a very potent agent, but a single dose of 1-800 grain of the hydrobromide thereof will not, in the vast majority of instances, be followed with a single untoward symptom. The U. S. P. gives the average dose of the crystal aconitine as 1-400 grain. I have noted that the smaller dose of the hydrobromide may be given at half hourly intervals, and that covering several individual exhibitions, without the least fear of dire results, and with the effect that desired actions have been

forthcoming. The U. S. P. gives the dose of hyoseyamine sulphate as 1-128 grain, and such amount will give the full physiologic effect. He who follows the mode of small dose at frequent intervals, exhibits 1-1000 grain every half to one hour, or in extreme cases, every fifteen minutes, and with the knowledge that he will secure the therapeutic effect, in most instances, long before the full physiological one appears. One could go through the entire list of the potent drugs and point out like instances with every one, and finally reach the conclusion, as has been my own experience, that it is not so much the drug employed, as the mode of administration.

MENINGISMUS IN PNEUMONIA.

By Emil Amberg, M.D.,
Detroit, Mich.

On January 29, a.m., I was called by Dr. McColl, to see the boy, 6 years old. Both mastoids were very tender on pressure. Although his ears discharged, both drum membranes were incised and his removal to the hospital advised. His lungs were carefully examined for a few days previously while he was very sick, and nothing definite was found. He was admitted to Harper Hospital 5:30 p.m. Temperature, axilla, 104.8°; pulse 120; respiration 26. Patient was very drowsy, and both ears discharged a little.

The father told me that the boy, although quite changed, had recognized him. This put me on my guard. I insisted on a thorough examination of the lungs, in spite of the previous negative findings. The lungs were examined by Drs. Jennings, Jr., and Clinton. A small spot on the right upper lobe under the arm was detected. I canceled the order for the spinal puncture and the operation.

Temperature 8 a.m. 104°, pulse 136; 12 m., 104°, pulse 132; 4 p.m., temperature 103°, pulse 130, respiration 38;

5 p.m., 102.8°, pulse 120, respiration 38; 8 p.m., 102°, pulse 128, respiration 34. Midnight, temperature 102°, pulse 120, respiration 30. At 5 p.m. Sherman's mixed vaccine No. 5 given by Dr. McColl.

January 31, 8 a.m., temperature 100.2°, pulse 120, respiration 34. At noon, temperature 98.8°, pulse 116, respiration 34. The boy made an uneventful recovery.

BILIARY CALCULI.*

Chronic jaundice of a year's standing in a woman aged 52, with moderate pain tenderness and rigidity over the gall bladder region, with a history of acute attack with fever and severe pain a year ago. Jaundice has continued since original attack. Malignancy considered in the diagnosis, but exploration advised. Gall bladder contained nine large faceted stones and the colon found overlying and adherent to the common duct, large stone felt in the common duct through the adherent colon. The gut was separated for an inch and one-half to expose the duct, after which a large faceted stone as large as the end of the thumb was removed. The query arose how were the facets produced in the common duct stone which was far too large for escape at this size through the cystic duct and which must have increased in size after passing into the common duct. A drainage tube was placed in the gall bladder and one at the cut in the common duct and anchored there by plain catgut. Free drainage for four or five days through both tubes, particularly the one in the common duct, which was well protected by a strip of gauze placed behind it and also fastened by fine catgut to the region of the duct opening. Recovery was complete and the jaundice soon disappeared.

*Abstract from the International Journal of Surgery, by H. Horace Grant, A.M., M.D., Louisville, Ky.

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EDITORIAL

RADIOGRAPHY OF SOFT TISSUES.

For a long time the profession has been familiar with radiography of the osseous system. The laity appreciates the value of X-ray examinations of the bones in fractures. It is dangerous, from a medico-legal standpoint, for a surgeon to treat a fracture case without having taken one or more radiographs.

Now we are coming to the era of the radiography of the soft tissues. Better technique, improved apparatus, and above all, a better understanding of the X-ray shadows of soft tissues, have led to a beginning appreciation of the importance of these examinations. With modern apparatus and the use of the stereoscope, cavities may be localized and indurations recognized the size of a grain of wheat, or smaller, in the lungs.

The possibility of radiographing such pathological lesions in tissue as soft as the lung, indicates the great value of

this method of examination in diagnosis.

Special attention is being paid to radiography of the lungs in the Practitioner Laboratory, 500 Auditorium Building. Members of the profession interested in the subject, are cordially invited to inspect the work being done by this laboratory.

SUIT AGAINST OUR EDITOR.

The difficulty between the postoffice authorities and the Editor of the Southern California Practitioner arose out of the publication of an article written by Dr. H. O. Hyatt, an eastern physician, that appeared as an Original Article in the March issue. The article in question advocates imprisonment of those who sell their bodies for sexual service, as a remedy for prostitution; and granting damages to the amount of a thousand dollars or more to the injured party, in case of transmission of a venereal disease, both for the preven-



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES 1912-NO. 12

STARTING RIGHT

tion of such infections and for its effect in encouraging continence among males. We regarded the article of sufficient scientific value to justify publication. Had we regarded it as indecent, of course we would not have considered publication of it. We believe that any suggestion that may "go a great ways in producing continence among males, save thousands of women from the surgeon's table and render blind infants fewer in number" is worthy of serious consideration.

CALIFORNIA ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS.

The members of the California Association for the Study and Prevention of Tuberculosis have long since realized that no State in the Union, having a tuberculosis problem at all comparable with that of California, is doing so little to overcome it.

The necessity for a full time executive secretary for the California Association for the Study and Prevention of Tuberculosis has long been known, but it is only recently that the Board of Directors of that Association have felt that they would be justified in making an effort to finance the State Association so that such a secretary could be employed. A contract has just been entered into with Miss Edythe M. Tate, formerly State Field Secretary of the Wisconsin Anti-tuberculosis Association, to enter the California field and attempt to do for this State what she so successfully accomplished in Wisconsin.

Miss Tate is a graduate of the University of Wisconsin, obtained a scholarship under the Russell Sage Foundation and spent the years of 1908 and 1909 making a housing investigation of the Polish section of Chicago. In 1909 Miss Tate was given a commission as a special agent for the United States government, working in the Immigra-

tion Commission department, which was making a special investigation of conditions affecting all phases of immigrant life.

From 1910 to 1913 Miss Tate was associated with Dr. M. P. Ravenel, President of the Wisconsin Anti-tuberculosis Association, which is a department of the University Extension of that State, and was engaged in active anti-tuberculosis work.

She was largely responsible for securing the appropriation from the State Legislature granting \$3.00 a week per indigent patient State Aid to counties establishing their own tuberculosis sanatorium. She secured appropriations for establishing institutions in several of the largest counties in that State.

She was most active in organizing Red Cross Christmas Seal campaigns and has been universally successful in her efforts before the Wisconsin State Legislature.

The California Association for the Study and Prevention of Tuberculosis feels that in securing the services of Miss Tate, they are rendering the people of the State of California a distinct service and that an experienced worker of Miss Tate's personality and ability, assisted by the large number of people who are interested in this most important problem, will place California among those States that are really accomplishing something in the fight against the Great White Plague.

A MOUTH WASH IN FEVER CASES.

In all fever cases where the tongue is coated, the lips dry and cracked and the teeth covered with sordes, the use of some cooling and soothing mouth wash would seem to be indicated.

Glyco-Thymoline in a 25% solution with cold water fills this want perfectly. Its frequent use is grateful to the patient and at the same time a great factor in relieving the condition.

EDITORIAL NOTES

Judge William N. Gemmill, of the Court of Domestic Relations of Chicago, says that during 1913 the causes of divorce in his court were as follows: Excessive use of intoxicating liquors, 46 per cent.; immorality of husband, 8 per cent.; immorality of wife, 2 per cent.; ill-temper and abuse by husband, 8 per cent.; ill-temper and abuse by wife, 3 per cent.; venereal disease of husband, 12 per cent.; interference of mothers-in-law, 6 per cent.; interference of fathers-in-law, 1 per cent.; youth of parties, 4 per cent.; laziness of husband, 3 per cent.; sickness, 1 per cent.

Henry Vaughan, physician and poet, was born in 1621, five years after Shakespeare died. He graduated from Oxford and was styled "The Silurist," from his having been born among the Silures, or people of South Wales. Every now and then his poetry, some of which is beautiful, indicates that his mind was on medical subjects as, for instance:

"And this I hourly find, for thou

Dost still renew and purge and heal;
My care and love, which jointly flow,
New cordials, new cathartics deal."

Roger Bacon, who was born in England in 1214, graduated from Oxford, was a great philosopher and died in 1292. He was especially fond of alchemy and medicine. One of his medical works gives a complete sum-

mary of popular Arab medicine and the care of health, especially in advancing years. In this work he praises rhubarb very highly and discusses antidotes to poisons.

WANTED—To purchase: Vulcan Oil. Address Occupant, 3116 So. Vermont Ave. Ph. West 43.

WANTED — Associate in General Practice (whose hobby does not run to surgery). Must be A1. Physician, moral, ethical, capable, tactful, genteel, skillful, resourceful, honest, up-to-date and industrious. Preference given to one familiar with laboratory diagnoses. Immediate business; 5-year contract; at end of which time you should have a \$10,000 yearly business, if you will follow my advice. (Therefore in the following 5 years you should do at least \$50,000 worth of business and would need divide with no one—save your wife.) Price: $\frac{1}{2}$ your net receipts during Contract period. Practice limited only by your ability. Long hours, no time off. State age, height, weight, health, complexion, school, religion, race, blemishes if any, etc. Opportunity of a lifetime for the right man. Tipplers and cigarette smokers need not apply. If you cannot fill requirements save your postage. Address: S. L. KISTLER, M.D., 3116 So. Vermont Ave., Los Angeles, Calif. Send full description and recent cabinet-size photo with first letter to insure reply.

BOOK REVIEWS

A TEXT-BOOK OF GENERAL BACTERIOLOGY. By Edwin O. Jordan, Ph.D., Professor of Bacteriology, in the University of Chicago and in Rush Medical College. Fourth edition thoroughly revised. Octavo of 647 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.00 net.

Jordan's Bacteriology is the outgrowth of lectures given to students in

the University of Chicago. This is the fourth edition within six years.

The appendix is devoted to the "Infectious diseases of unknown causation." The diseases considered here are Whooping-cough, Rocky Mountain Spotted Fever, and Mumps. In a recent issue of the Journal of the A.



AMERICAN MEDICAL ASSOCIATION PRIZE CARTOON SERIES

THE SELLER OF IMPURE FOODS: "YE'RE OUT FOR THE COIN AS I AM. I SHOULD THINK THIS LINE WOULD ATTRACT YOU. A GOOD PROPOSITION. BIG MONEY AND LITTLE RISK"

SECOND STORY MAN: "WELL YE SEE ITS THIS AWAY. ME IDEALS WOULDN'T STAND FOR POISONING LITTLE KIDS AND DE LIKE."



M. A., which came to the reviewer's desk at the same time that this volume was received, the very positive statement is made that Whooping-cough is due to the bacillus pertussis of Bordet and Gengou. This organism and the apparent immunity from pertussis vaccination, are described by Jordan. It seems that not all the laws of Koch have been fulfilled by this bacillus, so that in our present state of knowledge we are not justified in accepting it as the proven pathogenic cause of Whooping-cough.

In this edition a chapter appears on the Filterable Viruses, and special attention is paid Poliomyelitis and the Bacteriology of Streptococcus Sore Throat. We heartily commend the work to medical students and practitioners.

SEROLOGY OF NERVOUS AND MENTAL DISEASES. By D. M. Kaplan, M.D., Director of Clinical and Research Laboratories of the Neurological Institute, New York City. Octavo of 346 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.50 net.

This may well be termed the American work on serology in nervous and mental diseases, and should prove of great value to physicians, particularly neurologists and psychiatrists. The subject is divided into the serology of the nervous and mental diseases of non-luetic origin, and the serology of the nervous and mental diseases of luetic origin. Special attention is paid the Wassermann reaction, the globulin test, the cell count, and the Fehling's reduction test.

A TREATISE ON CLINICAL MEDICINE. By William Hanna Thomson, M.D., LL.D., formerly Professor of Practice of Medicine and of Diseases of the Nervous System in the New York University Medical College; Ex-President of the New York Academy of Medicine, etc. Octavo volume of 667 pages. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$5.00. Half Morocco, \$6.50.

Thomson's Clinical Medicine is notably practical, paying chief attention to

those subjects which concern the physician when he deals with the sick. Knowledge gained in the laboratory or at autopsies, while indispensable, yet in time should precede all prescribing. It is the condition of the living patient which then demands exclusive attention.

The volume contains much that is of value and many rather striking statements. The opening chapter begins with the statement that "Outside of hot, moist climates, the most common cause of disease and of death is from 'catching cold.'" The following is given regarding the treatment of "catching cold:" "Any area of chronic inflammation should have the corresponding cutaneous surface carefully protected." Then the author goes into an argument in favor of the use of chest protectors and such like. It is difficult to comprehend how he reconciles the use of these dirty chest weakeners with his excellent advice regarding the use of cold baths of a temperature and duration sufficient to cause the greatest and most perfect reaction.

The work is quite distinctive in character and well worthy the careful perusal of thoughtful practitioners.

PRACTICAL THERAPEUTICS. Including Materia Medica and Prescription Writing, with a description of the most important New and Non-official Remedies passed upon by the Council on Pharmacy and Chemistry of the American Medical Association. By Daniel M. Hoyt, M.D., Formerly Instructor in Therapeutics, University of Pennsylvania; Fellow of the College of Physicians; Assistant Physician to the Philadelphia General Hospital. Second edition. Revised and rewritten. St. Louis: C. V. Mosby Company, 1914.

The arrangement of the material is such that the reader can get the drug, its physiological action, and in most cases its specific physiological action on different organs, such as the brain, spinal cord, heart, arteries, skin and intestines; the toxicology and its treatment, and also the therapeutic indica-

tions and contra-indications. It gives the combination and value of most proprietary remedies. There is added a therapeutic index, that is a time saver to the busy man.

DIGEST OF COMMENTS ON THE PHARMACOPEIA OF THE UNITED STATES OF AMERICA (Eighth Decennial Revision) and on the National Formulary (Third Edition) for the calendar year ending December 31, 1912. By Murray Galt Motter and Martin I. Wilbert. Hygienic Laboratory Bulletin No. 93, April, 1914. Treasury Department, United States Public Health Service, Washington: Government Printing Office, 1914.

This volume is issued about one year later than it should be presented to the profession and those interested, to be of the most value. It is the eighth bulletin of the present series, which rounds out three decades of the systematic compilation of comments and criticisms on the Pharmacopœia, begun by the late Charles Rice in 1883. It is a valuable work, and we only regret its late appearance.

ANATOMY AND PHYSIOLOGY OF THE EYE AND ITS APPENDAGES. By John Welsh Croskey, M.D., Ophthalmic Surgeon to the Philadelphia General Hospital, Philadelphia, Pa. Philadelphia: Smith-Edwards Co., 129 North Twelfth Street.

A monograph of 18 pages, containing two remarkably clear plates. It is the outgrowth of the instruction given to students and nurses at the Philadelphia General Hospital during the past ten years.

THE CLINICAL HISTORY IN OUTLINE. By Paul G. Woolley, S.B., M.D., Professor of Pathology, College of Medicine, University of Cincinnati; Director of Laboratories, Cincinnati General Hospital, Cincinnati, O. St. Louis: C. V. Mosby Company, 1914. Price \$1.

Every practitioner should work out some such outline. The one here presented strikes us as too brief to be theoretically complete, and far too cumbersome to be of practical value. However, it is suggestive, and in that way may prove of service.

A MIND REMEDY. By John G. Ryerson, M.D., Boonton, N. J.

This small monograph of 82 pages is devoted to the narration of numerous cases of a great variety of diseases that have apparently responded remarkably well to the administration of lactose. The results here recorded are striking. Whether it is a "mind remedy" or not, if such results are obtainable, the work of the reporter with this simple remedy could readily be corroborated or discredited.

DISEASES OF BONES AND JOINTS. By Leonard W. Ely, M.D., Associate Professor of Surgery, Leland Stanford Junior University, San Francisco, Cal. Sextodecimo: 220 pages, 94 illustrations. Surgery Publishing Co., New York. Price, cloth, \$2.00.

The unusual interest now manifested by the profession in Acute and Chronic Arthritis, as well as other forms of Bone and Joint Diseases, makes this book particularly timely. Prof. Ely is particularly well equipped from experience to present an authoritative work, having specialized in this particular branch of surgery for years.

This book is intended primarily for the general practitioner, but instead of furnishing that long suffering and very important person with a mass of details, and with many methods of treatment from which he may choose, the book lays down broad general principles, with the evidence upon which they are based, and then shows how these principles may be applied. In a brief terse way, it presents the Anatomy, Physiology and Pathology of Bones and Joints, Acute and Chronic Arthritis of various types, Ankylosis, Diseases of the Shafts, Acute Osteomyelitis, Chronic Inflammations in the Bone Shafts, New Growths in Bone, etc. The profuse Photo-Micrographs with other illustrations aid materially in placing up to the eye of the reader the contents of the book and the marginal side-heads, printed in contrasting colors, permits of ready reference.

It is a book which will be much appreciated by the general practitioner and can be read with the assurance that it presents valuable instructions from an authoritative source upon a subject where much light is needed.

COAKLEY'S LARYNGOLOGY. A Manual of Diseases of the Nose and Throat. By Cornelius G. Coakley, M.D., Clinical Professor of Laryngology in the College of Physicians and Surgeons, Columbia University, New York. New (5th) edition, 12mo, 615 pages, with 139 engravings and 7 colored plates. Cloth, \$2.75 net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

This work has long been recognized as one of the most practical and useful manuals of Laryngology in the English language. It touches upon the pathology, simplifies and abbreviates the diagnosis, and emphasizes those methods of treatment which are most practical. Its statements are brief and clear, and its illustrations convey valuable supplementary information. This book gives quickly and easily the practical working points indispensable in the every-day routine of the busy physician. Its teaching quality, as well as its simplicity, are among its attractions, for it is a favorite text for undergraduate students. With the publication of this new edition, the fifth, Coakley's Laryngology is again before the profession in revised form.

GUIDING PRINCIPLES IN SURGICAL PRACTICE. By Frederick-Emil Neef, B.S., M.L., M.D., Adjunct Professor of Gynecology, Fordham University School of Medicine, New York City. Sexto-decimo: 180 pages. Surgery Publishing Co., New York. Price, cloth, \$1.50.

The author answers herein some of the questions which present themselves to the general practitioner and surgeon, particularly in the beginning of his career, during the period in which he formulates for himself the rules that are likely to direct him in his future work. The viewpoint is based on clinical studies in the operating room and at the bedside of the patient. The book covers the practical points in the

preparation of the patient for an operation, the arrangement of the operating room, the important relations between the surgeon and his anesthetist, the assistant, the family physician, the nurse during the course of the operation, also the after care of the case.

Other chapters in the book cover such important considerations as Sterile Washes and Wound Dressings, Sterilization of Utensils and instruments for the operation. The Surgeon's Hands, Wound Healing and Scar Formation, Asepsis, Suture Material, Anesthesia, Incision, the Course of the Operation, Care of the Patient after Operation, the Treatment of Unclean Wounds, in fact, within this book of 180 pages will be found those very necessary essentials that guide in the successful handling of operative work.

The mechanical features of the book are superb, presenting throughout marginal headings in contrasting ink, facilitating most ready reference.

ANOCI-ASSOCIATION. By George W. Crile, M.D., Professor of Surgery, School of Medicine, Western Reserve University, Cleveland; and William E. Lower, M.D., Associate Professor of Genito-Urinary Surgery, School of Medicine, Western Reserve University, Cleveland. Octavo of 259 pages, with original illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.00 net.

This volume contains in Part I a statement of the kinetic theory of shock and the principle of anoci-association and a summary of a long series of experiments. In Part II the application of the kinetic theory to the technique of surgical operations is described.

The authors investigated the comparative effects on the blood-pressure and respiration of traumatism of different kinds and of varying degrees of intensity inflicted upon various parts and organs of the body, and concluded that shock is the result of exhaustion. Investigating the methods by which shock might be prevented, they found that shock phenomena do not follow in-

juries in territories the nerve supply of which was blocked. After investigating many drugs and following many different lines of research, they concluded that shock is most conspicuously diminished by morphin administered hypodermically and by local and regional anesthesia; and that careful handling, sharp dissection and minimum trauma are effective in preventing shock.

Believing that the most vital effect of shock is the impairment of the vasomotor mechanism, these investigators turned their attention to the maintenance of the blood-pressure. They found that as long as an animal's blood-pressure is maintained within certain limits, life is sustained. Strychnia was found to actually make the condition worse, and they concluded that it is "as logical to treat traumatic shock with strychnia as it would be to treat strychnin shock with trauma."

Experiments in maintaining blood-pressure by applying pressure to different parts of the body, showed that blood-pressure may be raised by local bandaging, and resulted in devising the pneumatic suit, by means of which the blood-pressure may be raised at will within a range of from 15 to 45 mm. of mercury. Such a suit has the disadvantage of being cumbersome and uncomfortable. It was also found that the blood-pressure may be raised by increasing the atmospheric pressure, as in a pneumatic cabinet. Animals placed in such a cabinet, with the respiratory tract connected with the external air, the blood is driven rapidly from the periphery into the thorax; however, the heart is so rapidly filled and its work so suddenly increased that dilatation readily occurs.

Next the investigators turned their attention to the treatment of shock by means of infusions. Thus they attempted to fill the collapsed circulatory system and thus raise the blood-pres-

sure so as to prevent the damaging anemia of the brain. Hemoglobin estimations and red blood cell counts showed that the blood is not diluted by such infusions as Locke's and Ringer's. Rapid intravenous infusions were made, and the solutions were found to pass through the vessel walls as fast as they entered. The abdomen distended rapidly and became hard and tense. Autopsies showed that the fluid had accumulated in the walls and lumina of the stomach and the intestines, in the liver and spleen, thus mechanically fixing the diaphragm and the floating ribs so that death was caused by asphyxia. Searching for an agent that would increase the peripheral resistance, so that for a time it would take the place of the impaired vasomotor mechanism, it was found that a continuous infusion of a 1:50,000 solution of adrenalin at the rate of 3 cc. per minute, would maintain the blood-pressure for many hours. Thus the circulation in a decapitated dog was maintained for eleven hours.

Searching for an agent with which to fill the blood-vessels, that would not pass through the vessel walls, would cause no chemical injury, would carry oxygen, and would always be immediately available, human blood was found to be the only fluid possessing all these qualifications. Thus, direct transfusion of blood was found the most ideal treatment for surgical shock.

Experiments and observations led to the conclusion that exhaustion from insomnia, from muscular exertion, from emotional excitation, from physical injury, from anaphylaxis, all cause histological changes in the brain, the suprarenals, and the liver, and that these stimuli do not cause histological changes in any other organ. In shock, they found the H-ion concentration of the blood increased.

The work of the investigators is of such absorbing practical interest, that we could not resist the temptation to

give this little volume a somewhat extended review, considering the limited space at our command.

THE CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume III, Number III. Octavo of 215 pages, 54 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Published Bi-Monthly. Price per year: Paper, \$8.00; Cloth, \$12.00.

Every medical student and practitioner would do well to read the initial article in this issue of Murphy's Clinics. It shows well the enormous opportunities for work in our profession. Though our profession is often called over-crowded, it seems that the workers are far too few.

THE PRACTICE OF SURGERY. By James G. Mumford, M.D., Lecturer on Surgery in Harvard University. Second Edition. Thoroughly revised. Octavo volume of 1032 pages with 683 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$7.00; Half Morocco, \$8.50.

This is a standard work on surgery, that has won great popularity in two editions. The paper, binding, and especially the illustrations, are exceptionally good. The general style of the work is conservative. Thus, in the after-treatment of acute appendicitis, we are directed to keep the patient abed for a week and then permit him to get about gradually. All good, sane advice, such as we would expect the noted author to give.

It is written in a style that is hard to resist. It is difficult to keep from believing all the writer's dictum—and then you would not go far astray. For the writer is one of our most able surgeons, and in this volume he deals especially with the practical aspects of the more common surgical affections. Here he is entitled to a hearing ex-cathedra. The volume begins with the consideration of Appendicitis, for which, of course, the only treatment recommended

is immediate operation. "Like the offending eye in the parable, the inflamed appendix should be cut out and cast away." (Why not bottle it?) Thus endeth the first chapter.

In Part II over one hundred pages are devoted to the Female Organs of Generation. It excites our wonder that a mere surgeon should be entrusted with the surgical consideration of these affections, so commonly recognized as the special domain of the gynecologists. However, you must distinctly understand that it would be absolutely sacrilege, or worse, for a general practitioner to do any surgery, much less write about any surgical subject in an authoritative manner, for that is the special prerogative of the Fellows of the American Surgical Association, such as the distinguished author of this work.

COLLECTED PAPERS FROM THE RESEARCH LABORATORY. Parke, Davis & Co., Detroit, Mich. Volume 2, 1914.

This volume contains twenty-two papers, giving the details of a wealth of experimental work. We would do well to encourage the firms doing such high-grade work.

DISEASES OF THE EYE. By Charles H. May, M.D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York, 1890-1903; Attending Ophthalmic Surgeon to the Mt. Sinai Hospital, New York; Consulting Ophthalmologist to Bellevue Hospital, to the French Hospital, to the Red Cross Hospital, and to the Italian Hospital, New York. Eighth edition, revised. With 377 original illustrations, including 22 plates, with 71 colored figures. William Wood & Co., New York, 1914. \$2.00 net.

A Manual that has reached an eighth edition needs no formal introduction to the profession. May's Manual is one of our best known text-books on the eye. Besides the English editions, translations have appeared in German, French, Italian, Dutch, Spanish and Japanese.

MISCELLANEOUS

MEMORANDUM CONCERNING THE CHEMICAL AND TOXICOLOGICAL EXAMINATION OF SOME SAM- PLES OF NEOSALVARSAN.

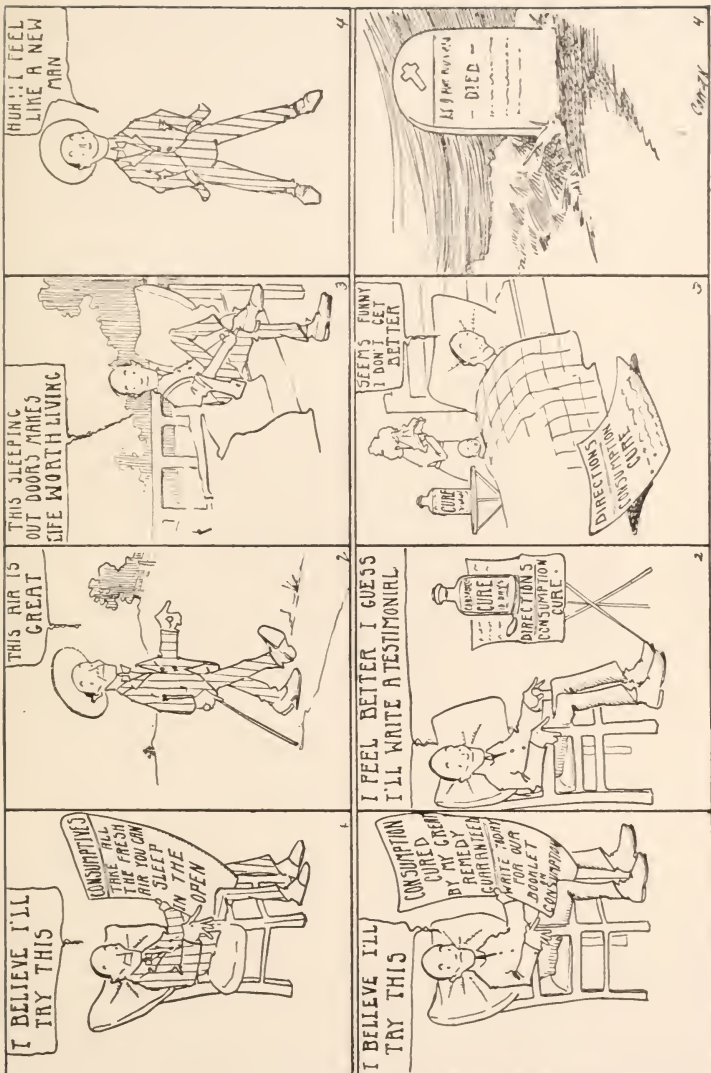
A thorough chemical examination of the contents of the lot of neosalvarsan received from Los Angeles, Cal., indicates that the material is of the normal composition usual for this product. The arsenic content was found to be 19.1 per cent, which agrees with the figure for neosalvarsan obtained some time ago by the chemist of the laboratory of the American Medical Association. Qualitative identity tests also agree with the results obtained in the laboratory of the American Medical Association.

The toxicity of this lot was determined by intravenous injections into rabbits. No difference in toxicity was found between the sample submitted (old neosalvarsan) and a sample of neosalvarsan (new neosalvarsan) bought upon the open market. Incubation of a solution of neosalvarsan in horse serum for half an hour at 54°C. and storing the mixture in a refrigerator after incubation for 20 hours did not increase its toxicity.* The results of these toxicity experiments are collected in the accompanying tables. The cause of the death of the eight patients at the Los Angeles County Hospital can, therefore, hardly be attributed to any marked increase in the toxicity of the preparation of neosalvarsan as administered to these patients.

It would appear, however, that the method employed differed in a very essential point from the one devised

by Ellis and Swift in that, for the treatment of syphilis of the central nervous system, the neosalvarsan was mixed with blood serum in vitro instead of being injected first intravenously into the patient with the subsequent withdrawal of serum from the patient and the injection of this serum into the subdural space of the patient. As it is a well known fact that salvarsan and neosalvarsan are excreted very rapidly by the kidneys after their intravenous injection and furthermore as it is known that the injected salvarsan or neosalvarsan passes to a considerable extent from the blood into the tissues, it is possible that there did exist a difference in the dose of neosalvarsan employed at Los Angeles as compared with the one advocated by Ellis and Swift. On the basis of a maximum dose of 900 mg. of neosalvarsan injected intravenously into a patient weighing 70 kilos, it is possible to calculate that 12 c.c. of serum obtained from such a patient would contain at the maximum 2 mg. of neosalvarsan provided that all the neosalvarsan remains in the blood. As we have good evidence to the effect that neosalvarsan is partly stored in the tissues and partly excreted by the kidneys, the absolute amount of neosalvarsan in the 12 c.c. of serum used for the Ellis and Swift method at the time of withdrawal of blood would probably be considerably less than 2 mg. It is possible that the dose of neosalvarsan used at the Los Angeles County Hospital was somewhat in excess of the one advocated by Ellis and Swift. It is, however, difficult to definitely decide this point without a chemical analysis of the blood serum obtained from patients which had received intravenous injections of neosalvarsan.

*This procedure is similar to that followed by Dr. Charlton as described by him in the Journal of the American Medical Association, March 21, 1914, p. 958.



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COMPARATIVE TOXICITY OF OLD NEOSALVARSAN (LOS ANGELES SAMPLE) AND NEW NEOSALVARSAN (SAMPLE OBTAINED ON THE OPEN MARKET) ON RABBITS WHEN GIVEN INTRAVENOUSLY (EAR VEIN).

Water as the Solvent (Freshly Distilled).

Old Neosalvarsan

New Neosalvarsan

(Died*; lived—)

Dose per Kilo in mgs.	Result	Dose per Kilo in mgs.	Result
200 *	—Used after 1 month	250	*1 day
320	*4 days	350	*4 days
440	*2 days	450	*5 hours
550	*10 hours	550	*4 hours
650	*2½ hours		

Fresh Normal Horse Serum as the Solvent (not Incubated).

Old Neosalvarsan

New Neosalvarsan

(Died*; lived—)

Dose per Kilo in mgs.	Result	Dose per Kilo in mgs.	Result
250	*2 days	200	*3 days
320	*1 day	250	*4 days
350	*5 min.; few air bubbles given	350	*5 days
		450	*15 min.
		550	*12 hours

COMPARATIVE TOXICITY OF OLD NEOSALVARSAN (LOS ANGELES SAMPLE) AND NEW NEOSALVARSAN (SAMPLE OBTAINED ON THE OPEN MARKET) ON RABBITS WHEN GIVEN INTRAVENOUSLY (EAR VEIN).

Normal Horse Serum as the Solvent. Neosalvarsan added and Incubated ½ hour at 54; then kept on ice 20 hours before Injection.

Old Neosalvarsan

New Neosalvarsan

(Died*; lived—)

Dose per Kilo in mgs.	Result	Dose per Kilo in mgs.	Result
200	*11 days	200	—Injected $\frac{1}{16}$. Alive
250	* 3 days	250	—Injected $\frac{1}{16}$. Alive
250	* 3 days	450	* 5 hours

Los Angeles, August 31, 1914.

Dr. C. H. Whitman,

Superintendent County Hospital,

Los Angeles, California.

My Dear Doctor:

Believing that the report of the Federal government's experiments with samples of neosalvarsan forwarded by me from the lot recently used at the County Hospital, and that belief meeting with the approval of the Grand Jury, I herewith enclose a copy of the government's findings.

Respectfully,

J. D. FREDERICKS,

District Attorney.

By PERCY V. HAMMON, Deputy

September 7, 1914.

Percy V. Hammon,

Deputy District Attorney,

Hall of Records, City.

Dear Sir:—

Permit me to acknowledge the receipt of your note of August 31st in which you enclose the report of Dr. John F. Anderson, Director of the Hygienic Laboratory Bureau of the Public Health Service, Washington, D. C., regarding his examination of the neosalvarsan submitted to him by you. I am very glad to have the report, and to know that his findings are in accord with Dr. Charlton's ideas, and also with my own belief. Namely, that the

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Main 4399—A5756.

refrigerating did not increase the toxicity of the remedy, thus eliminating that factor as a cause of death.

So far as his reference to the Swift and Ellis method is concerned, no claim was ever made by anyone that the method followed was the same as theirs.

Now, as to the dosage, that is so well and positively known to us, that so far as we are concerned, it may be absolutely ruled out of the question. It

then resolves itself into the consideration of one thing only and that is as I have always contended, decomposition of the neosalvarsan by the entrance of oxygen through an undiscovered fracture in the glass ampule container. Either that, or the drug had decomposed before entering the container.

Very truly yours,

(Signed) CHAS. H. WHITMAN.

Dr. Trinwith's Sanitarium

GLENDALÉ, CAL.

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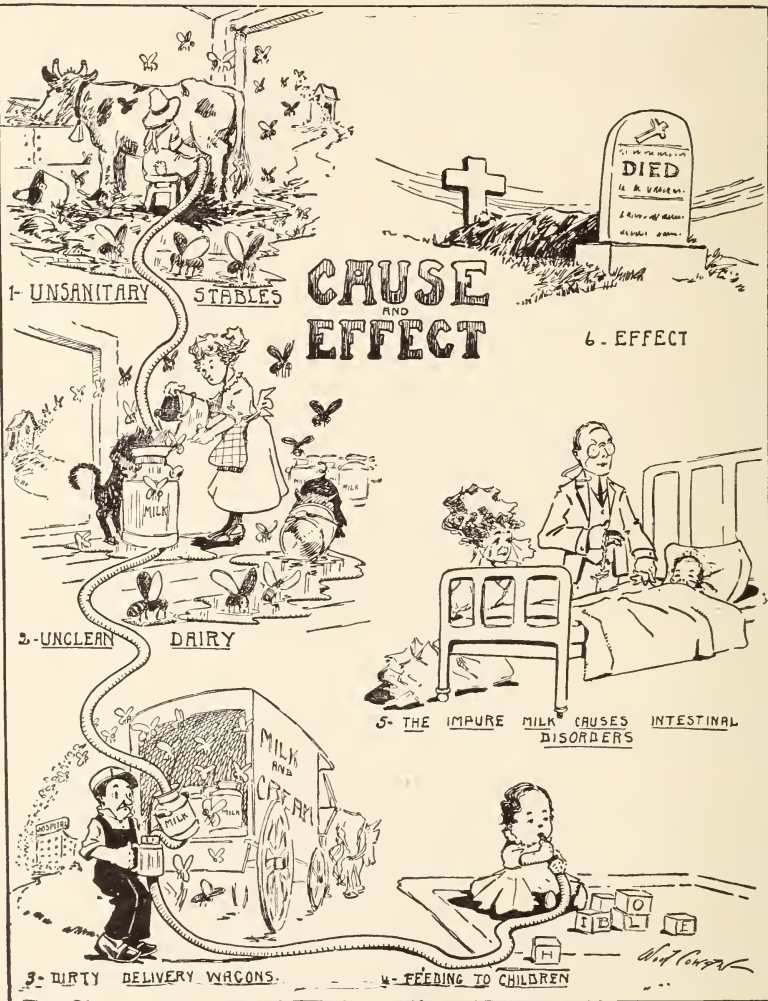
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THE INTERNAL SECRETIONS AND THEIR RELATION TO DISEASE—A REVIEW.*

BY LORENA M. BREED, M.D.

The subject under consideration is complex and obscure, yet it is still one of the most fascinating branches of medicine and it may be of interest to note some of the land-marks in the acquisition of what knowledge we possess upon it.

In 1776 Haller, the physiologist, grouped the thyroid, thymus and spleen as glands having no ducts, yet secreting fluids which found their way into the blood. In 1844 Joannes Müller classed the spleen, thyroid, supra-renals, thymus and placenta as glands which were different in action from ordinary excreting glands. In 1849 Berthold published a work which was the result of experimental transplantation of testicles in cocks. Biedl ascribed to him the honor of first demonstrating the significance of an internal secretion. This demonstration, however, was neither heeded nor recognized until the work of Claude Bernard, who in 1855 made his brilliant observations upon

the glycogenic properties of the liver showing definitely that the sugar brought by the portal vein to this organ was converted into glucose by the liver cells and poured into the blood to be distributed to muscle and other tissues as needed. In 1869 Sam Sequard, prompted by Addison's discovery of the connection between the supra-renal glands and the disease which bears his name, experimented further with these bodies and found that extirpation caused rapid death, but that this could be prevented or postponed by injection of extracts of these glands. About twenty years later he exploited his views regarding ovarian and testicular extracts for declining vigor. There seems to be some doubt as to whether these extracts really fulfilled the claims made for them, but whatever view we take of the value of his experiments, we must acknowledge him as the founder of modern opotherapy. Riverdeus and Koehler first showed the importance of

*Read before the Southern California Medical Society.

the thyroid by operations for the relief of goitre. Sir William Gull described myxedema and observed the similarity to cretinism. In 1880 Sandström discovered the para-thyroids and twelve years later Gley and others showed the importance of their secretions. In 1889 Pierre Marie associated the pituitary gland with acromegaly and described the relation of its secretions to the body development.

According to Adami, the doctrine of the internal secretions may be said to have come into its own when George Murray demonstrated that injections of extracts of healthy thyroid glands of the domestic animals caused the disappearance of all the distressing symptoms of myxedema. Then followed the observations of Greenfield, that the symptoms of hyperthyroidism in experimental animals were associated with overgrowth of this gland. Since the important investigations of the past twenty years, attention is being more and more turned toward the ductless glands and their relation to each other and to the entire body. Bio-chemistry is now being studied in connection with pathology and a proper conception of normal chemical processes of the body together with the fact that disease may be caused by simply a failure or a perversion of these chemical processes, has come about through a systematic study of the glands of internal secretion. While we do not know the functions of these glands definitely, as we do of the organs furnishing external secretion, yet, since the recently published works of Swale Vincent, Harvey Cushing, Falta and Biedl, our knowledge has been so largely increased, and that knowledge promises to be of such value to the clinician, that it seems of real importance that every general practitioner should be familiar with the results thus far accomplished. With further knowledge of these glands, we shall see more clearly that mysterious mechanism of

immunity and anaphylaxis, and the chemical processes going on in the body during every illness and intoxication, forming and destroying certain substances in the blood which leave definite traces for years, sometimes for life. We shall understand why each person's body defenses are different. In short, we shall understand the underlying principles of life itself.

The cells of the heart, stomach, liver, kidney, etc., have individual functions to perform, but there must be co-operation and adjustment to the needs of the body as a whole, else life could not be maintained; or if maintained, would be unbalanced and purposeless. Formerly the co-ordination of cell activity of aggregate life was supposed to be regulated entirely by the mechanism of the nervous system, and it is not strange that for so long this seemed sufficient to answer for the co-ordinative actions of the body. Of hardly secondary importance in controlling the activities of the cells constituting our bodies, are the internal secretions and specific chemical agents designated by Starling as *Hormones* (from the Greek *hor-mo-me* "I excite I arouse.") These hormones are produced principally in glandular organs, and are carried with the internal secretions in the blood stream to other organs which they excite to functional activity. According to Starling these messengers called hormones are of two kinds, nutritive and excitant, and their effects may be out of all proportion to their quantity, thus an internal secretion does not contain a hormone unless it has an exciting or nutritive action on certain specialized cells and inversely a substance injected into the blood which has an exciting action is not a hormone, unless it passes into the blood by the internal secretions. These messengers are present everywhere in the blood, but not everywhere active. The hormones therefore are specific in their action and the cells which react or respond to their

cell are also specific. As there are unlimited varieties of these cells, we may expect an unlimited combination of effects and consequences. But if into these actions, and reactions, we introduce the law of co-ordination, we can see a remarkable system of regulation which is comparable in many points to the nervous system, for the phenomena follow a definite order in succeeding one another. We have this difference, however, that the path of transmission of the hormones is by the circulation and therefore slower, and the duration of action less exactly limited.

According to Kohn, secretion, either internal or external, represents a highly specialized grade of metabolic activity, and should be distinguished from general metabolism as rigorously as the contraction of muscle from general motility. External secretions are passed out from the organs which secrete them, onto a free surface. Swale Vincent defines internal secretion as the process of preparation and setting free of certain substances of physiological utility (the materials for which are supplied by the blood) by certain cells of a glandular type. The substances set free are not passed out onto a free surface but into the blood stream and thus to the entire body, exercising a balancing and correlating influence. Hastings Guilford in speaking of this series of correlations which terminate in the perfect balance of the body, says that it is not so much a question of correlation, as excitement or depression of correlation. He says: "In the harmony produced by their concerted action, we have reason to believe that the leading part is played by the thyroid. This supplies a stimulus for the metabolism of the body as a whole. During infancy and childhood, when it is most important that the fires of metabolism should be controlled, the influence of the thyroid is checked by the thymus, by the lymphatic system in general, and by the pineal gland. These bring

about a delay of sexual activity which is so essential to the proper maturation and stability of the somatic faculties. Probably the first to break through this cordon of conservative influences is the adrenal glands, which awaken the dormant sexual organs, and hasten the growth of the muscular and skeletal systems. At about the same time, the skeletal system is still further stimulated by secretions from the pituitary gland. This secretion hastens the development of every organ in the body, including the sex organs. These latter now ripen apace, and assisted by the combined action of the ductless glands, sometimes stimulating, at others restraining, carry the development of the body in waves and tides to its flood." This, then, is the normal body, fully developed and acting harmoniously. That this harmonious balance can be seriously disturbed and disease produced by a failure of these internal secretions or by a hyper activity, or perverted activity of one or more of these glands, has been conclusively demonstrated by a long series of animal experiments on the effects of extirpation, transplanting and grafting of these glands and by feeding them to animals, as well as to the human, together with clinical observations.

The principal organs of internal secretions are the thyroid, the parathyroids, the hypophysis or pituitary body, the epiphysis or pineal body, the adrenal bodies with the entire chromafin system and the intestinal and gastric glands. These organs furnishing both internal and external secretions are the liver, pancreas, ovaries, testicles and uterus.

The thyroid represents a pure type of a gland with internal secretions, and the interrelationships involving it are perhaps, more extensive and better established than any other ductless gland. The diseases of the thyroid which may develop as a result of a disturbance of its internal secretions also explain the

functions of this gland. It has been but forty years since the first account of myxedema was given by Sir William Gull. Then followed the work of Ord, Greenfield, Sir Victor Horsley and others, who demonstrated that cretinism, myxedema and strumapriiva was due respectively, to congenital lack of thyroid secretions, and loss by disease or removal of gland. In the Medical Press, July, 1913, George Murray makes mention of the fact that the first case of myxedema treated with thyroid, is still alive and well. She has taken ten minimums of liquid thyroid extract daily, and no variation of the dose has ever been found necessary. Less than a gallon of the extract, therefore, has maintained her in health for twenty-two years. Myxedema presents a typical syndrome, viz: mental and physical lethargy, peculiar dense, thickened, dry scaly skin, dry falling hair, with teeth and nails showing trophic disturbances, slow, small pulse, cold extremities, constipation, lowered basic exchange, and protein requirements, and when developing in the young, growth retarded or completely stopped. In view of the fact that this condition is relieved, or completely cured by administration of thyroid extract, it is evidently largely due to a hypo secretion of the gland. In strong contrast to this, we find another condition characterized by extreme nervous irritability, tremor, profuse perspiration, insomnia, increased pulse rate, and palpitation, with often enlargement of the heart, and usually a diffuse hypertrophy of the thyroid. Here the basic exchange is increased, also protein metabolism, and in order to preserve nitrogen balance, it is necessary to give more carbo-hydrates and more proteids in order to depress protein metabolism to a minimum. Even small doses of destrose may cause alimentary glycosuria. The stools contain a high percentage of fat and there is often a diarrhoea. That there is a con-

nection between these conditions has been recognized.

Cretinism and myxedema are results of defective thyroid secretions in different stages of body development. Post-mortem examinations show deniguration or absence of the thyroid gland. On the other hand, while we find in Grave's disease, usually a swelling of the thyroid gland and a hyper secretion, we do not find contrasting conditions of increased growth and development. We find the dwarf in the one, but not the giant in the other, and while the sexual system is depressed in the one, it is not greatly exaggerated in the other. It seems evident, therefore, that under normal conditions, the thyroid presides principally over metabolism, and that in one condition the fires smoulder, and in the other flares up beyond control. There are such widely different views held regarding the character of the thyroid gland in exophthalmic goitre, on account of the small series of cases many authors have used, as well as the differences depending on the districts in which they are found, and the different stage in which the disease is recognized, that there would seem to be many classes of goitre. Marine and Lenhart believe that the simplest conception includes parts of three different anatomical processes and of three corresponding functional stages, viz: (1) the developing of the compensatory or hyper active stage, (2) the involuntary recovery or colloidal stage, and (3) the thyroid exhaustion, or premature atrophy or myxedematous stage. All of these stages may overlap so that in one gland one may see any degree of anatomical or physiological process.

Ord first drew attention to the fact that myxedema was a natural sequel, not a complement of exolthalmic goitre, and recently this view has been emphasized by West, Dock, Howard, Marine and Lenhart. They believe it significant that myxedema never precedes,

but follows, or accompanies exophthalmic goitre, as in both conditions they find a lowered resistance to bacterial infection, and a lessened alexic activity of the blood serum. In both conditions the lymphoid tissue increase is general, the extent of which may be clinically judged by the examination of the blood. In both conditions the heart hypertrophy is primarily a work hypertrophy and the secondary changes dependent upon failing nutrition. Horsley has shown that in the early stages of myxedema, the nervousness and tremor are quite constant. In experimental monkeys, this preceded the classical symptoms of strumaprima. McHarrison also notes the occurrence of a nervous stage preceding the classical manifestations of endemic cretinism in Gilgot and Chitral India. Marine and Lenhart believe that further study will reveal these nervous manifestations of the so-called exophthalmic type during the developmental stage of myxedema, just as anatomical studies have shown that the thyroid tends to undergo hyperplasia prior to the development of the myxedema complex. Vincent believes that on account of conflicting clinical and experimental data, it is plain that the doctrine of hyperthyroidism is not for all time secure. Hastings Guilford, in his paper at the recent Medical Congress, London, in considering abnormalities of function of the thyroid gland, pointed out that while myxedema is regarded as hypothyroidism and Grave's disease as hyperthyroidism, the one was by no means an antithesis of the other, and Swale Vincent adds, that myxedema is something more than merely thyroid insufficiency. It is accepted, however, by most authorities, that the thyroid manufactures an internal secretion, which is essential to the proper growth and normal metabolism of the entire body, and the function of this secretion is to prevent poisoning by the products of body metabolism, or by infections

from without. The extreme liability of thyroidectomized animals to infections, is strong evidence in support of this view. There seems to be nothing definite as to the chemistry of this secretion. The significance of iodine is not clear, though Vincent thinks that it is impossible altogether to escape from the suspicion that treatment with thyroid preparations may, after all, be only a mode of treatment with organically combined iodine in an easily assimilable form. There is evidence that this internal secretion is controlled by nervous impulses passing to the gland by way of the vagus nerve. According to Matti and Capelle, the thymus is persistent and enlarged in 74 to 79 per cent of cases of Grave's disease. Benda and Lewis have shown that there is a decrease of chromophile cells of the anterior lobe of hypophysis with increase of colloid material. Vincent and Jolly regard thyroids and para-thyroids as a single physiological apparatus, derived from similar sources, intimately associated embryologically, and working together physiologically. In their fully developed state they find no differences between their constituent cells. Forsyth strongly supports these views. He looks upon the parathyroids as essentially thyroid in nature, possessing no peculiar function but engaged in active secretion of the same substance as the thyroid gland, and when the thyroid is removed, the remaining para-thyroids may take on its function and change their structure accordingly. Removal of thyroids only, sometimes give rise to nervous symptoms of tetany, while removal of parathyroids only, may occasionally cause chronic symptoms of cachexia. The frequent anatomical continuity of the two kinds of tissue, and the transition forms are significant, also the occasional occurrence of colloid vesicles in the para-thyroids.

Cushing believes that there exists a characteristic and recognizable syn-

drome for a primary derangement of each of the ductless glands, either on the side of over-activity, or under-activity, and in the progress of these disorders, we may expect transitional and opposed states due to perversion or excess of secretion on the one hand, and diminution, or loss of secretion, on the other. Heretofore, disorders of the thyroid gland have furnished the only fairly clear example of these counterposed and transitional states. But he thinks that now we have learned to distinguish clinically between an excess, or perversion, and an insufficient secretion of the pituitary body. This gland develops early in embryonic life and has a dual origin. The posterior or cerebral portion arises from a hollow protrusion in the floor of the third ventricle. The anterior portion arises from a diverticulum from the pharynx and is epithelial in origin. The posterior or cerebral portion is surrounded by an epithelial investment which, as it extends upwards over the infundibular stalk, is called the *pars intermedia*, and during fetal life, contains a cavity which communicates with the cavity of the third ventricle. In adult life, this cavity is replaced by lymph channels which empty directly into the third ventricle. The posterior lobe is comparatively non-vascular and composed mainly of neuroglia, in the meshes of which exceedingly soluble colloidal or hyaline bodies are seen under suitable methods of fixation. Herring believes this to be a product of secretory activity, and Cushing and Goetch, who claim that the cerebrospinal fluid actually contains a substance with the properties of extracts of the posterior lobe itself, sustain his views. The *pars anterior* which is a typical ductless gland, discharges its secretions into the large sinusoidal blood channels which traverse it. It is chiefly related to factors of skeletal development, and may be considered to elaborate a hormone, capable of stimulating growth. On the

other hand, the neuro-epithelial *paraposterior* is in a sense, a gland of external secretion, its active principle or principles reaching the blood stream by way of the cerebrospinal fluid. This posterior lobe is closely related to metabolic processes, and in cases of thyroid insufficiency, it has been found to hypertrophy, and contain a stainable colloid material. It is also related to the assimilation of carbo-hydrates, and a deficiency of its secretion, leads to a marked increase in sugar tolerance with associated tendency to adiposity, subnormal temperature, dry skin, polydipsia and polyuria, loss of hair, characteristic psychic, often epileptiform disturbance, in fact a sort of pituitary myxedema. Professor Schäfer has shown that the posterior lobe including the *pars intermedia*, supplies a hormone which regulates the tone and contractility of plain muscular tissue generally, also of the heart, and stimulates activity of mammary gland and kidney. Herring and Schäfer observed, that while posterior lobe extract constricts the arteries of the whole body, it dilates the arteries of the kidney. Wiggs found that this extract, while slowing the heart, increases the amplitude of contractions. On the other hand, an excess of posterior lobe secretions, whether due to excessive functional action, or over administration of extract, causes tissue waste, carbo-hydrate intolerance and moist skin. With each of these conditions there are symptoms referrible to a secondary derangement of other ductless glands, especially the generative organs, producing apparent activation with hyperplasia of the hypophysis and a definite anaphrodisia, with hypopophysial hypoplasia. It has been generally conceded, that maladies with the phenomena of skeletal over-growth, are due not only to a derangement of the hypophysis, but that the underlying factor is a functional hyperplasia of the anterior lobe, since removal of this

part of the pituitary body in pre-adolescent animals, leads to a striking loss in skeletal development. Clinically, tumors, as well as diseased processes in young individuals produce the same effect. In the only known conditions associated with skeletal over-growth, viz: acromegaly, and gigantism, one usually finds enlargement of the gland or a histologically demonstrable hyperplasia. Dean Lewis, also Benda and Erdheim, have found hyperplasia of the chromophile cells with no gross enlargement of the gland itself. If the disorder occurs before ossification of the epiphyses, we have a more or less pronounced gigantism. If an epiphysial union has already taken place, more or less pronounced acromegalic changes may occur. Cushing's series of cases illustrate that acromegaly in the long run, tends toward a glandular insufficiency, as the early stages suggest a coincident period of hyperplasia. Moreover, partial removal of the hyperplastic pars anterior, by both Cushing and Hoehenegg, has led to remission of symptoms, as, partial removal of hyperplastic thyroids have caused remission in symptoms of Grave's disease. It is now generally accepted that the skeletal changes in acromegaly and gigantism are expressions of the same morbid influence and that this disease is due to a functional instability of the pars anterior, doubtless brought about by some underlying biochemical disturbance which leads to the elaboration of a perverted or exaggerated secretion, containing a hormone that accelerates skeletal growth.

Dean Lewis believes that those cases in which no hypophysial involment are found, are open to doubt. The possibility of a pharyngeal hypophysis has been overlooked. Skeletal development may be modified by glandular insufficiency, if this process starts before full stature is attained. Therefore the most marked cases of skeletal under-growth occur before adolescence, though the

stature may be dwarfed if inaugurated even later.

The acquirement of excessive subcutaneous deposits of fat, which sometimes dominates the clinical picture, as in *Dercum's adiposus doloroso*, has been attributed to posterior lobe insufficiency, and is coupled with the acquirement of high sugar tolerance. Cushing points out that this extraordinary power to assimilate excessive amounts of sugar, can be accounted for in no other way than by the transformation of the carbo-hydrates into fat, and the associated chilliness and drowsiness would appear to indicate a low ebb of tissue oxidation. As an argument in favor of this view, if we inject excessive amounts of posterior lobe extract, we have a condition which is exactly the reverse, viz: emaciation spontaneous glycosuria, and elevation of temperature. Although adiposity may also occur with deficiency of the other ductless gland secretions, the hypo-physial adiposity seems to be, by far, the most frequent and is probably due to a hormone elaborated in the posterior lobe which is essential to carbo-hydrate metabolism. As a result of some recent work, Weed, Cushing and Jacobson conclude that the role of the posterior lobe of the pituitary gland in the metabolism of carbo-hydrates is under the control of the fibres which reach the gland by way of the superior cervical sympathetic ganglion, and that stimulation of this nervous pathway in the fourth ventricle, at the superior cervical ganglion, or by exciting the pituitary gland itself, liberates a chemical substance which causes glycosuria, independent of any possible nervous impulses reaching the glycogen holding cells of muscles or abdominal viscera.

In his early work, Cushing expressed the opinion that this disturbance of carbo-hydrate metabolism might be one of the varied expressions of the polyglandular nature of the malady and

due to a secondary change in the pancreatic islets. But by later studies, it was definitely demonstrated that hypophysial diabetes was possible, irrespective of any change in the pancreas itself. It must be remembered that other ductless glands, principally the adrenal and pancreatic islets, play an important role in sugar metabolism. Mehring and Minkowski have shown, that if the pancreas is completely removed, a condition of glycosuria inevitably follows, even if carbohydrate food is excluded from the diet, while if a small portion is left, the appearance of the sugar in the urine is prevented. Yet the ducts may be completely occluded without causing a glycosuria, or any effect on the islets, though the pancreatic cells proper may atrophy. On the basis of these and other experiments, it is believed that the islets form an internal secretion which passes into the blood and plays an essential part in carbohydrate metabolism, that this secretion exerts an inhibitory influence upon the liver cells in their conversion of the glycogen into sugar, and if the liver is incapable of performing this function properly, the limitation is compensated for by a hypertrophy of these islands. The findings of Ohlmacher suggests that diseases of the liver are generally accompanied by enlargement of the islands of Langerhans. The precise manner in which the internal secretion of the pancreas normally prevents glycosuria, may not be clear, but as Vincent suggests, it is of supreme medical importance to bear in mind that a certain order of cases of diabetes mellitus are, in all probability, due to insufficiency of the internal secretion of the pancreas. Frowin noted that pancreatic diabetes did not occur after extirpation of the adrenals. Zueler definitely assigns an adrenal origin to the pancreatic diabetes of Mehring and Minkowski. He concludes that the adrenal secretion is normally neutralized by the pancreas, and that whether

it is a negative pancreatic diabetes or a positive adrenal diabetes, the real stimulus, to the genesis of glycosuria, is adrenal secretion. As pointed out by Schäfer, there seems to be a connecting link between glycosuria set up by pancreatic disease or removal, and that due to the action of adrenelin. Falta believes that an action exists between thyroid and pancreas and Lincini has noted that in dogs, after the extirpation of the pancreas, there is a hypertrophy in the thyroids with an increase of colloid material.

The production of secretia, a discovery of Bayliss and Starling, is considered by Vincent to be the best authenticated example of internal secretion which can be quoted. This secretion is manufactured in the duodenum, and its mechanism is thus described: "The layer of epithelium which lies between the lumen of the gut and the absorbent vessels manufactures a substance called pro-secretin. The acid of the gastric juice upon reaching the duodenum, converts the pro-secretin into secretin. This secretin is then absorbed into the blood stream and carried to the cells of the pancreas and stimulates that organ to secretory activity."

The external secretions of the pancreas is then, the result of the internal secretion of the duodenal mucus membrane so that in cases of lack of the external pancreatic secretion, we must look for the source of the trouble in the gastric juice or the duodenal mucus membrane.

The adrenal bodies with the chromaffin system is an example of a double organ with attending satellites. The medulla, which is derived from the embryonic sympathetic system, has both physiological and histological evidence, that it is an internally secreting gland, and that adrena is the product of its secretion. This internal secretion seems to pass by the way of the adrenal veins, into the general circulation in order to assist the activity, and maintain the

tone of sympathetically innervated muscle, and in particular the walls of blood vessels, and is one of the chief factors in maintaining normal blood pressure. Jaskins and McClure state that the injection of adrenal extract is exactly equivalent to stimulation of the sympathetic nervous system, the result of such injections depending, in any organ, on its sympathetic innervation. If it has no sympathetic fibers, no effect is produced and it is believed that the same functions must be assigned to other parts of the chromafin system. Elliot observes that plain muscle deprived of its sympathetic innervation acquires increased irritability to epinephrin. This fact, Haskins and McClure think, strongly suggests that the chromafin tissue has a function of compensating for the injury of sympathetic fibers. Thus after sympathetic impulses fail, their place is taken by epinephria stimulation of the nerve endings, and that the peculiar relationship existing between the chromafin system and the sympathetic system, is of utility only during periods of special stress. During the rise of blood pressure caused by epinephrin injections, the adrena shows a marked consumption of oxygen which is sometimes increased threefold. Vascular hypotension is seen clinically in infectious diseases, in tumors of the adrenal as well as in Addison's disease which is commonly of tubercular origin. Adrenal deficiency is also associated with hypertrophy of the lymphatic system and thymus in which it is noted that the condition of the adrenal is primary. Hedgier who studied material from all available cases of Addison's disease in the pathological institutes of Berne and Basel, found, that in the majority, there was a recognizable condition of status lymphaticus. There is no evidence of a functional connection between adrenal medulla and cortex. The cortex which is derived from germinal epithelium, is much larger than the

medulla, and microscopically the structure suggests a high degree of secretory activity. Reasons are given suggesting that it yields a hormone which influences the growth and nutrition of certain tissues and organs and especially the organs of reproduction. Bullock and Sequiera report cases of adrenal atrophy, accompanied by sex depression while twelve cases of children with sexual precocity, showed enlarged adrenals. It is believed that the cortex assists in the destruction of toxic products of metabolism and elaborates a substance essential to the animal economy, that it is correlated with the sex glands, and with the formation of fat, and that when there is abnormal growth of the reproductive apparatus, there is apt to be an associated disturbance in the adrenal cortex.

Blair Bell states that there is evidence that hyperplasia of the adrenal cortex can upset any influence the female genital gland is supposed to possess, and can produce in a female some of the secondary characteristics of the male. Professor Glynn collected six cases of hyperplasia of the cortex occurring in young females in all of whom there was growth of hair on the face, shrinkage of the breast, amenorrhea, sometimes with masculine voice. The enlargement was unilateral and neoplastic in character. Metastases were sometimes found. He reports a second series of thirteen pseudo-hermaphrodites of whom twelve were females in which the enlargement was bilateral, and hyperplastic in character. This pathological evidence is valuable when we remember that the adrenal cortex is developed from the mesothelium of the wolffian ridge adjacent to the germinal area.

There is now a general agreement among clinical pathologists that disease of the pineal body are accompanied by a characteristic train of symptoms. Pellizi has described the pineal syndrome as "macro-genito-somia-prae-

cox." There is a premature sexual and genital development which gives the appearance of an adult. The degree of development of the body corresponds to that of an age five to twelve years more advanced. There is a premature ossification of bones. The intelligence is advanced, with a tendency to converse on philosophical subjects. This condition always develops before the eighth year, and sometimes before the third, and is more common in boys than in girls.

The pathogenesis seems to be a destructive lesion or a tumor of the gland, causing pressure and therefore a lessened activity of its secretions. Adiposity has been found in some cases of pineal tumor, unassociated with sexual disturbances. Bartlet explains this adiposity by a hypo secretion of the posterior lobe of the hypophysis, which itself is a result of third ventricle hydrocephalus, since occlusion of the duct of Sylvius by a tumor in the pineal region, frequently results in hydrocephalus of the third ventricle, a condition often associated with adiposity.

Blair Bell believes that the thymus has a very important relation to the development of the individual and the reproductive organs and that once the genital functions are established, the thymus rapidly undergoes atrophy and plays no further part in the metabolism of reproductions. It has been shown that the thymus undergoes hyperplasia after removal of the ovaries. Eunuchs have been found to possess a thymus gland which has not undergone involution. Paton found that if thymectomy be performed before puberty, there was a rapid development of the genital glands. The thymus persists normally, until puberty, when the sex glands undergo physiological hypertrophy, but if the sex glands atrophy the thymus persists or hypertrophies. Henderson noted a persistent thymus in one hundred and fourteen cattle which had

been castrated when young. Godall in making a histological study of guinea pigs after castration, found that both the lymphoid tissues and Hassal's corpuscles, share in the delayed atrophy. It appears, therefore, as shown by Biedl, that the thymus inhibits development of the genitals or that their development follows the withdrawal of thymus secretion. This secretion is intimately connected with calcium metabolism, and Beidl notes that rickets followed thymectomy in young animals. It is evident, that through its internal secretion it has an interrelation with the glands and prevents sexual precocity. Activity of the sex glands seem to lead to depression of the thymus, while hypertrophy of the thymus occurs in both Addison's and Grave's disease.

In the Gale lectures before the Royal College of Surgeons, London, Blair Bell says that the two great generalized functions of all living tissues are, firstly, the co-ordinated development and life of the individual, and, secondly, the reproduction of the next generation. He believes that all of the ductless glands control the metabolism in response to the genital functions, but, that in addition, the reproductive organs adapt the whole organism to the possibilities of the situation and regulate the secondary characteristics both physical and psychical, to suit the needs of the individual. He insists that in order to solve the problem surrounding the genital functions, we must focus simultaneously the two essential processes of life, viz: the individual metabolism and the reproductive metabolism.

Strictly speaking, the ovary is only concerned in the temporary function of reproducing the species and by its hormones or internal secretions, of bending the metabolism of the body to its purpose. The ovary does not influence general metabolism except so far as this special function of reproduction is concerned. The rest of the ductless glands, however, are related to

the genital functions in various ways; e.g., the thyroid, pituitary and suprarenals, influence the development, and subsequently preserve the integrity, and activity, of the genitalia, while the thymus and penal glands appear to prevent sexual precocity. Blair Bell cites a case of a woman with myxedema who did not menstruate for some years. After a course of thyroid treatment she not only menstruated regularly, but conceived. Absence of sexual development at puberty, in cretins indicates the powerful influence of both thyroid and pituitary glands on the development of ovary and testicles, and this relationship is emphasized, by the remarkable development which takes place in these organs under the influence of thyroid extracts in adult cretins past the age of puberty. Thompson, who has done considerable work with pregnant dogs, concludes that there is both clinical and experimental evidence of a connection between the thyroid and the sexual system through the internal secretion of the former, in that a hypothyroidism influences sexual activity adversely, and that sexual activity, whether physiological, or pathological causes a hyper-activity of the thyroid, and that this hyper-activity constitutes an index to the toxemia of pregnancy, to counteract which the thyroid raises its anti-toxic protective power, and that there is abundant clinical evidence that what is called physiological hypertrophy of the thyroid is a valuable safeguard against the toxemia of pregnancy. Swale Vincent states that in many eunuchs there is a tendency to certain forms of gigantism. This together with the clinical fact that many women after the menopause have increased growth of the hands, with acromegalic features points to an associated influence of the pituitary gland. The condition of persons or animals, in whom the testes have not descended,

or from whom they have been removed, is strong evidence that beside the function of the preparation of the specific reproductive element, the organs have other important duties to perform. If the testes are extirpated in quite young stags, the antlers never develop. Marshall points out that in horned cattle where both sexes possess horns, the growth of these structures are not affected by castration. In the case of cocks, castration arrests development of comb and spurs. Bowin and Aneel report further, that injection of extract of the interstitial tissue of testes diminishes effects of castration. Shattuck and Seligman find that occlusion of the vasa deferentia in sheep and fowl does not hinder the development of the secondary male characters. After ligature of the vas, the interstitial cells remain unaltered although the spermatogenetic tissues degenerate. These results point to an internal secretion on the part of the interstitial cells of the testes and that metabolic results arising from the functions of the testes are due to its absorption into the general circulation. It is assumed that the growth and integrity of the prostate are determined by a hormone furnished by the testes.

That the ovary has an internal secretion which has an effect upon the metabolism of the organism, is evidenced by the constitutional disturbances which arise during menstruation and at the menopause, as well as after extirpation. Marshall and Jolly consider that the ovary is an organ providing an internal secretion which is elaborated by the follicular epithelial cells or by the interstitial cells of the stroma. That this secretion circulates in the blood inducing menstruation, (as menstruation ceases after removal of both ovaries, but can be made to recur after transplantation of ovarian tissues into another situation.) They consider that after ovulation, the corpus luteum is formed, and provides also an internal

secretion, which (Franeukel believes) governs the fixation of the ovum, and is functionally correlated with the hypertrophy and congestion of the uterus, and also controls the flow of milk. It is believed that excessive ovarian secretion increases the output of phosphates and causes softening of bones. Herman cites a case of osteomalacia cured by removal of ovaries, while chronic rheumatism, with diminution of urea and phosphoric acid, is found to be due to ovarian insufficiency. He also cites cases in which removal of ovaries and administration of thyroids cause surprising regressive growth of cancer in young women. Sweet, Corson, White and Saxon have done recent experiments which show that in transplantable tumors in rats and mice the susceptibility, also the rate of growth of these tumors, may be influenced both positively and negatively, by certain forms of diet. Castration of the male renders the animal more susceptible to the transplant, and increases the rate of growth. They tentatively suggest that these special diets exert their influence on tumor growth, through the intermediation of the ductless glands. It is a clinical fact that cancer is a disease largely of that period of life when certain of the ductless glands lose their normal function, and this loss of function entails changes in the entire chain of interrelations of these organs, which have such a profound influence over body metabolism. As exemplified by the relation of the thyroid to growth in cretinism, and by the relation of the pituitary body to spermatogenesis, and oogenesis, the only pronounced instances of embryonic cell production which persists in adult life. At this time in the life of the individual, Blair Bell believes the basis of treatment should rest upon the regulation of the existing disarrangement, and by the administration of the necessary secretions. So great are the individual variations, that some react to thyroid,

some to pituitary, and still others to a combination of glands. Porlion and Urechia believe this association to be (poly-glandular) and is thyro-ovarian or hypophysio-thyro-ovarian. Most authors prefer to associate symptoms of tetany with thyroids and para-thyroids, but these authors have given opo-therapy-ovarian, also opo-therapy hypophysis in tetany. Paul Dochez of Paris cites three cases of tetany, one in a woman of fifty-five, eighteen months after the menopause, another a woman suffering from pseudo-mixedema, amenorrhea, and parasthesia and a case of paralysis agitans, all of whom were cured by opo-therapie-ovarian. He suggests that perhaps the thyroid must obey the incitement of the ovary, and that the condition has an ovo-thyroidean toxic origin. Dementia praecox has been connected with deficiency of the ductless gland secretions by Dercum and Ellis, also certain skin diseases, by Sir Malcolm Morris, while cancer and tuberculosis seem to be looming in the distance. An enormous tract of unexplored territory lies before us, about which one thing at least is certain, viz, that it holds the key to many vexed questions, amongst which may be included that of immunity from, and successful resistance to, bacterial infections. Not that bacteria are not present, or that they do not cause definitely recognizable lesions, but that they could not exert their malign influence, were it not for some weak spot in the defenses in the liquor sanguinis, which weakness may be due to a deficient or perverted secretion of some of these ductless glands. As Hastings Guilford suggests, we seem driven to the conclusion that the information as to the more definite functions of ductless glands must still be gathered from clinical, surgical and post-mortem study.

Woodwork, A. S.—Line of Treatment in Mental and Physical Deficiency Based upon Therapeutic Action of the

Internal Secretions. St. Barth. Hosp. Rep't. 48:39 (1913.)

Marine and Lenhart—Archives Internal Medicine, VIII, September, 1911. 242 W. Holt Ave., Pomona.

BIBLIOGRAPHY, 1909 TO DATE.

General

- Aaron, C. D....The Hormones. Journ. Amer. Med. Assoc., 58:407 (1912).
- Bell, W. B....Genital Functions of Ductless Glands in Female. Lancet, March 22 and April 5, 1913; also in: Brit. Med. Journ., March 29 and April 5, 1913.
- Bertelli, G., Falta, W. and Schweeger, O....Ueber die Wechselwirkung der Drüsen mit innerer Sekretion. Zeitschr. f. klin. Med. 71:23 (1910).
- Biedl, A....Innere Sekretion. Wien. klin. 29:281 (1903); later article in: Verhandl. d. Gesellsch. Deutsch. Naturf. u. Aerzte 83. pt. 1:271 (1911).
- Biedl, A....Innere Sekretion. Berlin 1910.
- Biedl, A....Internal Secretory Organs: their Physiology and Pathology; trans. by L. Forster. New York, 1913.
- Bya....Nos Connaissances sur les Sécrétions Internes. Archiv. Med. Belges, 4th ser. 38:289.
- Cushing, Harvey....The Pituitary Body and its Disorders.
- Crispin, A. M....The Ductless Glands as a Factor in the Production of Racial Differences. Month. Cyc. and Med. Bull. 5:589 (1912).
- Dennison, H. S....Hormonic Equilibrium of the Glands of Internal Secretion. Colorado Med. 9:68 (1912).
- Eppinger, H., Falta, W. and Rudinger, C....Ueber die Wechselwirkungen der Drüsen mit innerer Sekretion Zeitschr. f. klin. Med. 380 (1909).
- Falta, W....Ueber Beziehungen der inneren Sekretion zum Salzstoffwechsel. Verhand. d. kong. f. inn. Med., 1909; 138.
- Falta, W....Ueber die Korrelation der Drüsen mit innerer Sekretion. Ergeb. d. Wissensch. Med. 1:108 (1909-10).
- Falta, W....Die Wechselwirkung der Drüsen mit innerer Sekretion. Wien. klin. Wochenschr. 22:105 (1909).
- Falta, W., Bertelli, and others....Ueber Beziehungen der inneren Sekretion zum Salzstoffwechsel. Verhandl. d. Kong. f. inn. Med. 1909:138.
- Falta, W., Newburgh, L. H. and Nobel, E....Ueber die Wechselwirkung der Drüsen mit innerer Sekretion. Zeitschr. f. klin. Med. 72:97 (1911).
- Glenn, T. H....Internal Secretions. Denver Med. Times, 32:533 (1912-13).
- Glynn, E. E....Influence of Certain Ductless Glands upon the Sex Characters. Liverpool Med. Chir. Journ. 32:149 (1912).
- Hoskins, R. G....Interrelation of the Organs of Internal Secretion. Amer. Journ. Med. Sci. 141:374:335 (1911).
- Howell, W. H....Chemical Regulation of the Processes of the Body by Means of Activators, Kinases and Hormones. Science, new ser. 31:93 (1910).
- Lewis, Dean....Journ. Amer. Med. Assoc. LV, Sept. 17, 1910. Archives of Internal Med. VII, June, 1911. Archives of Internal Med. XII, Aug., 1913.
- Ross, S. J....Ductless Glands. Brit. Med. Journ., 1910, 1:1203.
- Roussy, G....Les Glandes à Sécrétion Interne. Paris Med., 1911:133.
- Schafer....The Ductless Glands. Brit. Assoc. Adv. Sci. Rep't., 1909:440.
- Vincent, S....Internal Secretions and the Ductless Glands. London, 1912.
- Claude, H. and Gougerot, H....Syndromes Pluriglandulaires. Gaz. d. Hop. 85:897 (1912).
- Claude, H. and Sourdél, M....Hémorridérose Viscérale et Insuffisance Pluriglandulaire. Bull. et Mém. Soc. Méd. d. Hop. d. Paris, 3d. ser. 34:32 (1912).
- Cotton, H. A....Disturbances of the Internal Secretions. Mod. Tr. Nerv. and Ment. Dis. 1:469 (1913).
- Croftan, A. C....Ductless Glands and Diabetes. Illinois Med. Journ., March, 1913.
- Crookshank, F. G....On certain Polyglandular Syndromes. Lancet, 1912, 1:1716.
- Dalché, P....Quelques Accidents Générals de la vie Génitale de la Femme; leurs Rapports avec les Dystrophies Polyglandulaires. Gaz. d. Hop. 85:795 (1912).
- Dalché, P....Syndromes Polyglandulaires et Troubles. Génitaux de la Femme. Rev. gén. d. Clin. et d. Thérap. 26:357 (1912).
- Dardel....Les Insuffisances Glandulaires. Scalpel, 64:635 (1912).
- Dercum, F. X. and Ellis, A. G....Examination of Ductless Glands in Eight Cases of Dementia Praecox. Journ. Nerv. and Ment. Dis., Feb., 1913.
- Falta, W....Diseases that Depend on Disturbances of Internal Secretions. Amer. Journ. Med. Sci., new ser. 137:496 (1909).
- Hochwart, L. V. F....Relations of Internal Secretions to Mental Conditions. Amer. Journ. Med. Sci., Aug., 1913.
- Morat, J. P....Les Sécrétions Internes et le Systeme Nerveux. Lyon Méd. 117:617 (1911).
- Morris, N....Internal Secretions in relation to Dermatology. Brit. Med. Journ., May 17, 1913.
- Münzer, A....Innere Sekretion und Nervensystem. Berl. klin. Wochenschr. 50:302:349:396 (1913).
- Münzer, A....Ueber die Bedeutung der Abderhalden'schen Forschungsergebnisse für die Pathologie der inneren Sekretion. Berl. klin. Wochenschr. 50:777 (1913).
- Osborne, O. T....Disturbances of the Internal Secretions Clinically Considered. Journ. Amer. Med. Assoc. 54:670 (1910).
- Owens, J. P....Internal Secretion as the Auto-immunizing Agent of the Body. Med. Herald, 29:15 (1910).
- Park, R....Relations of the Internal Secretions to Surgical Conditions. Northwest Med., new ser. 1:1 (1909-10).
- Starr, M. A....Neuroses Dependent upon Errors of Internal Secretion of the Ductless Glands. Med. Rec. 81:1217 (1912).
- Weber, F. P...."Baggy" Subcutaneous Fat. Disorder of Internal Secretion. Royal Soc. Med. Proc. 6: Clin. Sect. 167 (1912-13).

In Therapeutics.

Aronsom, M....Remarks about Hormones and Organotherapy. Med. Pharm. Critic and Guide, 15:286 (1912).

- Berkeley, W. N....How far have we got with Clinical Use of Internal Secretions? *Old Dominion Journ. Med. and Surg.* 16:213 (May, 1913).
- Hare, H. A....Therapeutic Application of Ductless Glands. *Amer. Journ. Obstet.* 66:514 (1912).
- Münzer, A....Scientific Basis of Organotherapeutics. *Med. Press and Circ.*, new ser. 95:170 (Feb. 12, 1913).
- Ott, I. and Scott, J. C....Action of Glandular Extracts upon the Amount of Epinephrin in the Blood. *Journ. Pharmacol. and Exper. Therapeutics*, 3:625 (1912).
- Ott, I. and Scott, J. C....Action of Animal Extracts upon the Bladder. *Month. Cyc. and Med. Bull.* 4:420 (1911).
- Ott, I. and Scott, J. C....Action of Animal Extracts upon the Secretion of the Mammary Gland. *Therap. Gaz.* 3d ser. 27:689 (1911).
- Ott, I. and Scott, J. C....Action of Glandular Extracts upon the Secretion of Urine. *Amer. Med.*, new ser. 5:79 (1910).
- Sainton, P....Les Glandes à Sécrétion Interne et l'Opothérapie. *Journ. Méd. franc.* 5:465 (1911).
- Starkey, F. R....Combined Use of Thyroparathyroid, Pituitary, Ovarian and Testicular Extracts. *New York Med. Journ.*, June 15, 1912.
- Williams, L....Therapeutic Promise of Internal Secretions. *Practitioner*, 87:605 (1911).

RELATIONS OF DERMATOLOGY TO GENERAL PRACTICE.*

BY DR. JOHN C. YATES, SAN DIEGO.

In presenting this paper, I do not expect to bring out anything new but to emphasize the fact that the dermatologist to be successful must not only understand the skin but all it contains.

Since the separation of Dermatology as a specialty and the necessary attention to the study of local features for differential diagnosis, we are all too prone to consider the skin as an independent structure and merely a covering for the rest of us. While it serves this purpose very satisfactorily, it is also an exceedingly important organ, having much to do with the health of the individual, and most intimate relations with the rest of the organs of the body. As a few illustrations I would mention, that it is the principal agent in the regulation of the temperature of the body, its miles of sweat pores giving off daily in insensible perspiration fully half as much water as the kidneys and under certain conditions much more, as in the excessive perspiration in crisis of certain diseases, in malaria and tuberculosis. The dryness of the skin in cholera and Bright's disease, Cachexia shown in cancer and other depressed conditions, ulcerations in the intestines with severe burns of skin, fatal results following varnishing or gilding of the surface, etc.

We all recognize that in most diseases there is a predisposing cause and

an exciting cause, but in no place is this so often demonstrated as in skin diseases. All agree that the skin can be affected by either local or internal causes; local causes are heat and cold, irritants, etc. Among the internal causes urticaria from gastro-intestinal derangement is probably best known, and we might mention syphilis and the Exanthemata.

Some years ago, mostly on account of Vienna teachings, practically all skin diseases were considered of local germ origin, but now practically all are placed at the door of faulty metabolism, auto-intoxication, neurotic disturbances, and even in those eruptions where parasites are found and given as the sole cause, there must be some constitutional element bearing upon the case, as in ringworm which has existed for a long period, will often disappear on approach of puberty, neither will it attack all exposed to it in schools, and it is very rare to find *Tinea Versicolor* in man and wife. Even animal parasites vary greatly in different individuals, as you often find in Scabies. Pediculi and fleas will not attack certain people, and the eruption caused by them in different people is not alike.

We know from surgical experience that pus cocci exist almost everywhere and are given as cause of impetigo, yet few of us are affected. So the derma-

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tologist using only local treatment poorly serves his patient.

Acne, in its various forms, is generally associated with an overloaded bowel and free purgation is one of the main points of treatment. Although obviously due to invasion of micro-organisms such as the staphylococcus, streptococcus or acne bacillus, a toxic condition of the blood due to a systemic poisoning from fecal or other morbid absorption is necessary for the growth and development of these organisms. The immunity to skin diseases is directly impaired by an obstructed drainage system.

Time and again skin lesions will appear after some special indiscretion in diet, as candy, pastry and liquor. The use of alcohol, and to a certain extent tea, coffee, tobacco are harmful in all erythemas, rosaceas, etc., by dilating superficial vessels and so increasing skin congestion. Anyone who watches an eczema patient for a length of time has plenty of opportunity to observe not only aggravation of the disease, but fresh outbreaks from errors of diet, constipation, or from depressant conditions such as overwork or nervous strain. Garrod found 47% of his patients with gout had eczema.

The relation between the skin and secretion of the kidneys is a matter of every-day observation in medical practice. All are familiar with the temporary changes in the urine which take place from a chilling of the surface or in fevers with a dry, parched skin and all are equally familiar with relief given to congested kidneys by free diaphoresis, but the converse has not been as fully recognized and known. In psoriasis you will probably find your patient not passing nearly the normal quantity of urine.

While relatively little is known as to the variations in performance of work of the lungs, there are often features relating to the respiratory system which may be of much importance in

connection with skin diseases, especially lupus and tuberculosis cutis. Imperfect or deficient action of the lungs must be important in relation to the vitality of the skin as well as the rest of the body and the benefit of fresh air and exercise on diseases of the skin are well known. Bronchitis is a very common accompaniment of eczema and psoriasis. Some years ago Sir Andrew Clark of London stated that asthma and urticaria are closely allied and probably a similar production of ephemeral swellings of mucous membrane. The nerve elements which are of great importance in connection with many skin diseases are the vasomotor nerves which control the capillaries. Their effect is daily seen in flushing of the skin or blushing or blanching from nausea, and in the production of Cutis Anserina or goose flesh, from cold or nervous cause. I need only mention the rebelliousness of Pruritus or the neuralgia of Herpes Zoster to show how serious may be the nerve complication in some of this class of disease, so we have the neurotic dermatoses and among these the neurotic eczema from severe nervous strain, anger or great excitement. Many instances are recorded of the effect of nervous or mental shock in producing changes in skin, especially whitening of the hair. Reflex phenomena are observed in eczema in teething infants, Pruritus of the anus and nose from intestinal worms, and Herpes Preputialis from stricture or urethral irritation. As direct influence, we have the lesions of leprosy. Psoriasis certainly bears some relation to rheumatism and in this connection we also have so-called purpura rheumatica. But which I think when true cause of rheumatism is discovered, we will find this not related but rather that the aches and pains are caused by some toxemia or some specific organism. This discussion could be continued almost indefinitely, but I have said enough to convince anyone that

dermatology is a wide field reaching well into all branches of medicine, and to show why arsenic internally and zinc ointment externally will not cure all skin eruptions.

Neither do I wish to leave the impression that the cure of a general or internal cause will stop the lesion of skin, as each one needs its own appropriate treatment; but by relieving the cause we prevent its return, which often not being done in the past has led many to regard some skin diseases as necessarily chronic or even incurable.

The most popular drug formerly was arsenic, which was regarded as a specific for most of the more or less chronic forms of skin diseases. Arsenical preparations are among the most powerful bactericidal agents, apart from their

irritating and therefore laxative effects on mucus membranes, and it is to this property that their so-called specific action is probably due.

Next most popular and one which still holds its place is potassium iodide. Iodine is now acknowledged to be one of the best bactericidal agents we have and hence its utility in the cure of a large number of very different skin conditions, especially when prescribed in small doses which permit of the iodine being liberated and so acting directly on the gastro-intestinal contents. Mercury, quinine and salol act in much the same manner.

The old adage, to prescribe aperients in acute and diuretics in chronic skin diseases, is as true today as ever.

THE NEGRO—AMERICA'S SPECIAL PROBLEM IN EUGENICS.

BY G. FRANK LYDSTON, M.D., CHICAGO, ILLINOIS.

Social and racial legislation through the medium of marriage control, sterilization of the unfit, the establishment of a minimum wage, regulation of the white slave traffic, etc., etc., is on the topmost wave of public interest. The most important problem in eugenics in America is, however, receiving very little attention. I refer to the race problem. There is but one race problem which confronts the American people—that of the relation of the blacks and the whites. All other problems are insignificant by comparison, and revolve around race egotism and religious bigotry, with the exception, perhaps, of the yellow peril, which is a problem so new and so unimportant that it would be difficult at this writing to forecast the results of the admixture of the bloods in the country.

Experience has shown that the admixture of the white and negro bloods is in general detrimental to both races. These bloods are distinctly alien. That admixture of the white and the black blood has been steadily going on ever

since our forefathers committed the crime of introducing slavery into the United States, is known to all men. That it is still going on is equally true. That it will continue is merely a common-sense deduction which requires for its support the most rudimentary knowledge of biology, human nature and social conditions in this country. It has been estimated that fully twenty-five per cent. of negroes in this country have white blood in their veins. It would be impossible to estimate the number of negroids who are successfully posing as pure whites. From certain private sources of information I have reason to believe that a rather formidable number of such individuals reside in Chicago. We have been wont to brush aside the menace of race amalgamation by symbolism, the dominant symbol being the term negro. By calling an individual a negro we have flattered ourselves that we have been able to protect our race against contamination with negro blood. A pure Ethiopian is termed a negro; a mulatto,

a quadroon and an octoroon are also termed negroes, and so on all along the line. If I mistake not, a certain statute enacted in the State of Louisiana for the purpose of prohibiting race amalgamation has defined a negro as an individual who has as much as one-thirty-second of negro blood in his veins. It is hardly necessary to state that, despite this legal definition, a knowledge of the existence of a single drop of negro blood in the veins of any individual results in his classification as a negro. The fallacy of this classification, so far as racial self-protection is concerned, should speak for itself. Nomenclature does not alter biologic law, and a man with the thirty-secondth of negro blood is no more a negro than a person whose veins contain one-thirty-second of Semitic blood is a Hebrew, a Moor or an Arab. This, irrespective of the fact that jet black throw-backs may occur even when the negro blood is extremely diluted.

As to the danger of negroids successfully passing as pure whites, I will state that in a certain large city of this country there are at least seventy-five female employees of a certain mercantile establishment who are negroids and who would promptly lose their positions if this fact were known.

In order that the white race in America might appreciate the menace of race amalgamation, it would be necessary to drop our nomenclature. From the standpoint of social and race menace, there is a vast difference between regarding an individual who has one-eighth of negro blood as a negro, or regarding him as a white man who is unfortunate enough to possess a proportion of one-eighth of negro blood. If the citizens of this great and glorious country ever come to realize that the symbol negro or nigger does not alter the biologic facts, they possibly may be able to face the race problem in a logical manner.

What has appeared to me to be a

fallacy, one which has been often advanced in refutation of the assertion that there is serious danger of race amalgamation in this country, is the statement that the octoroon is infertile. There are many readers of this article who probably can present evidence on this point much more comprehensive than any that I could gather. I would, however, call attention to the Louisiana statute, which I have already quoted, and ask whether those who framed this classification of the statute were ignorant of the facts. If they were not ignorant of the facts, where do the individuals who are defined as negroes because their veins contain one-thirty-second of negro blood originate?

I wish to state in passing that the decreased fertility of mixed blood is primarily due to the crossing of a relatively fertile race, the negro, with a relatively infertile race, the white. It must be remembered that there is a vast difference between breeding an octoroon back to either the pure white or pure black blood, and breeding octoroon upon octoroon. Or, granting that the octoroon is infertile, we will apply the same argument to the quadroon. The diminution of fertility incidental to the admixture of white blood with the negro blood should be corrected by breeding back, especially by breeding to the pure black. If the admixture of bloods in the mulatto or quadroon is more fertile than the white, the breeding back to the white would decrease fertility to a point approximating the white standard, and breeding back to the black would increase it.

Experience and observation have shown that the mixed blood has not the physical stamina and moral fiber of either parent stock. Environmental factors must, of course, be taken into consideration here. But whatever the explanation, the consensus of opinion has been that the admixture of bloods was detrimental to the progeny. This with due admission that many mixed

bloods have distinguished themselves as social factors, so far as their environment would permit.

By a strange dispensation of fate that portion of our country which freed the negro and the country from the crime of slavery, appears destined to bear the brunt of any evils which may accrue from admixture of the races. Tolerant as the North professes to be of the negro, it is more intolerant of him in many ways than is the South. It also is less skilled in handling the race problem in some directions, while wiser in others. With strange inconsistency the surface tolerance of the negro by the North merely serves to conceal an intimate tolerance of him under the rose. The number of negroes in Chicago who have white wives doubtless would stagger the uninitiated. That Northern intolerance of the negro is largely bluff can be proven to the satisfaction of anyone who will ride a few times on the South State street cars in Chicago, a line which enjoys the soubriquet of "Dark Town Limited." An off-hand estimate of the total number of negroes who ride upon these cars, and even a non-expert estimate of the proportion of them which contain white blood, would, I fancy, be sufficient.

Reverting back to the proportion of negroes in the United States who contain white blood, admitting for the sake of argument that it is twenty-five per cent., and leaving out of consideration altogether negroids who are passing as whites, have we now in this alone a lesson in race protection? History has shown that a relatively feeble, numerically weak race, if thrown into a social system dominated by a numerically greater and more aggressive race, is eventually absorbed. We will suppose, for the sake of argument, that no admixture of races had yet occurred. We would have a proportion of something like one in eight or one in nine individuals in this country who are of

pure black blood. It is easy to imagine what would inevitably occur in time. Admixture would be as certain as it would be in a barrel containing eight gallons of white paint if a gallon of black paint were poured into it. The admixture would more certainly occur because of sex attraction in the case of human beings.

Our legislators and others who fondly imagine that the white race can protect itself from race amalgamation by statute and social intolerance deceive themselves. Biologic law may be legislated against and preached against, but it goes on as remorselessly as it has from the beginning of things. The worst of it all is that in order to defend ourselves from race amalgamation we are compelled to do two things: First, to fly in the face of provisions of our own Constitution—a point which my friend, Mr. Vardaman, has endeavored to make clear, and, second, to interfere with the primitive right of sex selection which pervades all nature. This primitive right of sex selection can never be abrogated by any legal enactments whatsoever, nor will the individuals who have no pride of race hesitate to break such laws where they are made. It is much easier to demonstrate a problem than it is to solve it. So far as I am personally concerned, I believe that the time when the race problem of this country could have been fairly met and solved in the interests of the white race has long since passed. There is only one remedy which could be effective, and that, I fancy, no one would seriously suggest, namely, sterilization of the entire negro race. This would be indefensible, even if it were practicable, which it is not. Penalizing both legitimate and illegitimate sex relations between the races, irrespective of wealth, social position and sex of the offenders seems the best solution. The penalty, in my opinion, should be heavier in the case of the white man or woman who breaks the law than in the case of the negro.



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EDITOR SOUTHERN CALIFORNIA PRACTITIONER.

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EDITORIAL

SUIT AGAINST OUR EDITOR.

The federal suit against our Editor, Dr. Malsbary, assails an article published last March, written by Dr. H. O. Hyatt, of Kinston, N. C. For the information of our readers, we will state that Dr. Hyatt was born in 1848, graduated from the Medical Department of the University of Pennsylvania in 1868, is a member of the American Medical Association in good standing, and has been honored by his local profession with the presidency of the County Medical Society and also the presidency of the North Carolina Medical Society and the Eastern Medical Association. It strikes us that such a man ought to be permitted to write in the medical press upon the suppression of the social evil and prevention of venereal diseases without subjecting the editor to a suit that may entail a fine of five thousand dollars, imprisonment for five years and the suppression of his journal. How would

you like to be a medical editor, if this suit were to be decided against us and establish a precedent?

INFANT MORTALITY.

Three Hundred Thousand Dead Babies. Birth Registration an Aid in Protecting the Lives and Rights of Children is a valuable booklet issued by the Children's Bureau Department of Labor, Washington, D. C.

Miss Julia C. Lathrop, chief of the Children's Bureau, is doing an important educational work. A diagram of the United States shows that California's laws on Registration of Births are very inadequate. Dr. Cressy L. Wilbur of the Census Bureau says 300,000 babies die annually in the United States before reaching the age of one year.

It is as if Chicago, the second city of the United States, were to be wiped out of existence once every ten years, not a single life being saved. In fact

only ten states in the Union had each in 1910 a population as great as the infant mortality for the preceding decade. The birth record is a safeguard for the newly born child. Dr. S. Josephine Baker, director of the Bureau of Child Hygiene of New York City, says: "The birth record is perhaps the starting point of about seventy-five per cent of our baby-saving work." It furnishes to the health officer and the visiting nurse the name and address of every baby and the health authorities send to the family in adverse circumstances a knowledge of hygiene and sanitation which may save the life of the child. Enforcement of child-labor laws and compulsory education laws should dovetail and both must rest on a basis of birth registration.

To those who are interested we have no doubt Miss Lathrop would forward a copy of this monograph on application.

SOUTHERN CALIFORNIA COLLEGES.

The Los Angeles Department of the Medical College of the University of California is now a thing of the past as far as undergraduate instruction is concerned. Dr. W. Jarvis Barlow, Dean of the undergraduate school, has resigned and the Board of Regents of the University of California have decided that a school for graduates was more necessary in Southern California than a school for undergraduates. Dr. George H. Kress has been elected Dean of this new State Graduate School. Dr. Kress is an excellent executive officer. He has been the Secretary of the undergraduate school for years, and is thoroughly familiar with all of the duties of his new position. He now has a field for a great work, and he is the one man for this work.

Los Angeles now has one graduate school and one undergraduate school. Her population is at least that of San Francisco, and we believe it is far bet-

ter to have but one school of each class. A city the size of San Francisco or Los Angeles has no use, in our estimation, for two undergraduate schools.

The faculty of this new State Graduate School has not yet been announced, but we know that it will be an able one.

The faculty of the Medical Department of the University of Southern California has recently added Dr. Fitch C. E. Mattison, Dr. W. W. Richardson, Dr. John J. Kyle, and Dr. Henry W. Howard to their numbers, and now requires one year's college work for matriculation.

TRAVEL STUDY CLUB OF AMERICAN PHYSICIANS.

The Travel Study Club of American Physicians, which made a successful Study Tour of Europe last year, has completed the plans for its 1915 Study Tour to the A. M. A. meeting in San Francisco, Honolulu, Japan, the Philippines, China, with optional return via Siberia and Europe, or via Canada. This is the first party of American physicians ever visiting the Far East and the new possessions of the United States. A most cordial welcome can be expected by authorities and members of the medical profession. The Travel Study Club would like to make its enterprise as representative as possible and asks all those interested to communicate with the Secretary, Dr. Richard Kovaacs, 236 East 69th Street, New York.

REPLY TO THE PROPOSED INITIATIVE TO LICENSE DRUGLESS HEALERS.

The primary purpose of medical license laws is to protect the public from incompetent persons who would give the impression that they are skilled doctors.

A four year high school course as a preliminary education, plus four years of actual professional training, is the minimum which should be demanded by

our laws of every person who would hold himself before the public as a competent doctor, no matter to what school belonging. Does any citizen think the above to be too much training for a doctor?

A doctor often holds in his hand the health and lives of his patients, and the economic success or dependency of the families of his patients.

If Dr. "So and So" is educated and well trained, then if he is a conscientious man, he will probably use every remedy and method conducive to the health and recovery of his patients. It matters little then, whether he received his training in an old school, a homeopathic, an eclectic, an osteopathic, or a drugless healing college.

Referring now to the special initiative petition, which gives the impression that drugless healers are sinned against in California, we wish to state this is a misstatement, for the present medical law provides for "Drugless Practitioners' Certificates;" and of such applicants, only 2400 hours of study are required as against 4800 hours of those who wish a "Physicians and Surgeons' Certificate!"

The "Physicians and Surgeons" must in addition have adequate preliminary education, which is not demanded of the "Drugless Healers."

The proposed initiative law to license "drugless healers" demands virtually that a man shall have only a knowledge of reading, writing and arithmetic, and that he shall attend at least eighteen months of training in a drugless practitioners' school. (Section 9 of the proposed initiative petition.) Think of it!

But worse than this is Section 20 of the proposed initiative, which permits a license to be granted to any person who claims to have practiced drugless healing for six months prior to the passage of this act.

There is nothing to forbid this new board, under this Clause 20, from granting a license to the graduates of

a "correspondence school" of drugless healing, or any other kind of a school, or perhaps no school at all, as long as the man states that he has been a "drugless practitioner" for six months.

In conclusion then, defeat this proposed initiative law for the "licensing of drugless healers":

First, because it could flood California with so-called doctors with professional training altogether inadequate to such a sacred calling; and

Second, because the present California law gives all of these drugless healers who have anything like a decent education, a chance to obtain licenses.

Therefore, vote NO on this proposed initiative law if you wish to safeguard the public health of California, and perhaps the lives of your own family and friends. It is up to the citizens of California to do this. Do your part. VOTE NO!

MISCHIEVOUS NURSING LEGISLATION.

We have gone far enough now to know that the California eight-hour law, as applied to pupil nurses, is a miserable fiasco from every logical standpoint. It does no good to anybody, least of all to the pupil nurses in whose interest it was supposed to have been passed, and it is doing an immense amount of harm in restricting the freedom of the hospitals of the state in their attempts to serve sick people efficiently.

But it was avowedly the purpose of union labor, at whose behest the law was enacted, to prosecute the principle of this law in every state in the Union, if it could be "put over" in the premier state of fads and foolishness. In keeping with this purpose, there is a proposal now before the people of the state of Washington to enact a similar law, but to go one more step and include graduate nurses. Think of it! Graduate nurses in private practice re-

stricted to an eight-hour day! Comment is superfluous.

Then comes along Kansas. The Board of Health of that state last week made a ruling that no hospital should operate a training school unless it has more than 15 beds, with an average of 10 of them occupied.

There is no doubt that there are many hospitals in Kansas and elsewhere that operate training schools that should not be permitted to do so, but why a restriction on a per-bed basis? There are just as many hospitals very much larger than 15 beds that are criminally inefficient in their hospital service to patients, and consequently in their training of nurses. The small hospital may not offer a very wide range of service to pupil nurses, and the number of cases in each class may be woefully small; but if there are ideals, and conscience, and an educated, well-trained woman on the job as head of the small school, who knows what nurse training should be, her pupil who may see only half a dozen obstetrical cases in the whole three years, and not half as many of the communicable diseases, will be turned out far better equipped to practice her profession than the graduate who has been trained like a circus seal, or whose training has consisted solely of a menial servitude of three years in a hospital without a conscience.

Then why make the number of beds in a hospital the basis of efficiency? Are there no other terms that spell efficiency?

How would it do to let the training of the nurses, as exemplified in examination before the State Board of Nursing registration, be the test of the efficiency of the school? The State Board of Nursing registration might be clothed with the authority to close a school that did not give its pupils an acceptable training. If this course is taken, the board itself should be looked into carefully, and its personnel ad-

justed properly—two practicing physicians, one hospital superintendent, and two nurses, for instance.

Some of us have feared, for a good while, that the leaders in the nursing profession were too insistent about legislation of radical sorts, and that there was entirely too much talk and too much thought about "shifts" and "hours of duty" and "schedules of pay," and other union labor fetishes, and too little thought about the dedication of the nurse to a vocation and profession that called for all her time and all her body and all her soul.

Now the whole nursing profession, backed up by the whole medical profession, and by the thoughtful, sane members of society at large, will have to band themselves together and exercise all their might to stem the tide that is sweeping them into the vortex to the union labor idealism that has for its object the leveling downward of the efficient to the measure of the inefficient.—The Modern Hospital.

Editorial, September, 1914.

MEDICAL BUILDING.

The Medical Building stockholders are being called upon to pay an assessment, notwithstanding the property upon which the option is held is said to have increased more than one hundred thousand dollars in value since the option was taken. It is probable that this fact and a general haziness of knowledge as to what has been done, may be responsible for the disinclination of many of the stockholders to be pleased by this call for an assessment. In order to clarify matters, a number of the stockholders have united and employed Mr. H. T. Morrow to investigate the transactions appertaining to the proposed Medical Building. It is possible that resistance to the assessment will be offered. At any rate, it would seem advisable that the stockholders should know just how matters stand and what to expect.

EDITORIAL NOTES

Dr. H. O. Eversole has taken offices in the Investment Building, 8th and Broadway, Los Angeles.

Dr. W. B. Bowman, the radiologist, has just returned after visiting the leading eastern men in his line.

Drs. E. E. Burk and C. V. Nelson have begun their duties as resident physicians at the California Hospital.

Dr. R. C. N. Cook has opened an office in the Baker-Detwiler Building, Los Angeles. Practice limited to urology and dermatology.

Dr. C. W. Decker has taken joint offices with Dr. E. Avery Newton in the Marsh-Strong Building, corner of 9th and Main.

Dr. Charles A. Shepard has associated with him in the El Reposo Sanatorium for the tuberculous at Sierra Madre, Robert T. West as business manager.

O. P. Sundin and Dr. E. W. Earing have been spending several weeks East putting in their time in the clinics of Dr. John B. Murphy and other eminent surgeons.

The Pacific Wassermann Laboratories have removed to Suite 1012-16 Hollingsworth Building, Sixth and Hill streets. The profession is invited to visit their new and enlarged quarters.

Dr. Edward Eisen, one of our bright young men, has opened offices in the Crocker St. Hospital. Dr. Eisen is the attending physician at the Los Angeles Orphans' Home.

The medical profession of Southern California rejoices over the safe return of Dr. H. G. Brainerd. He was in Berlin when war was declared. It is very interesting to hear his description of the situation in Europe as he saw it.

Dr. Guilford H. Sumner, secretary and executive officer of the Iowa State

Board of Health, Des Moines, is one of the most efficient health officers in America. The profusely illustrated bulletin issued by Dr. Sumner for August is the best popular treatise on vaccination and smallpox we have ever seen. Dr. Sumner has also recently issued a special bulletin entitled "Save the Babies" that is very graphic and valuable.

The following were recently elected members of the Los Angeles County Medical Association: Dr. J. S. Lancaster, 1835 Oxford Ave., Los Angeles; Northwestern Un. Med. School, 1910. Dr. Moses Thorne, 414 Grosse Bldg.; Columbia, 1898. Dr. Otto Barnes, Huntington Park, Cal.; U. of S. C., 1913. Dr. J. Harvey Cleaver, 518 Wright & Callender Bldg., Los Angeles; University Maryland, 1880. Dr. J. W. Cline, 4354 Melrose Ave., Los Angeles; U. of Colo., 1896. Dr. W. E. Waddell, 606 O. T. Johnson Bldg., Los Angeles; Pulte Medical, 1887. Dr. William O. Blanchard, Sawtelle, Cal.; U. S. C., 1913, and Chicago Hahnman, 1902. Dr. Chas. Bock, 703½ Central Ave., Los Angeles; Ft. Wayne Col. of Med., 1897. Dr. Arthur B. Cecil, 400 Marsh-Strong Bldg., Los Angeles; Johns Hopkins Medical School, 1909. Dr. John W. Nevius, 705 Fay Bldg., Los Angeles; U. of C., 1911.

It is encouraging to see in the above list Dr. W. E. Waddell, who has heretofore been one of the leading Homeopaths of California, and Dr. Wm. O. Blanchard, who is also a graduate of a Homeopathic school.

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MISCELLANEOUS

"DRUGLESS" PHYSICIANS.

That our readers may not be caught asleep at the switch, we give space to the following communication from the American Association of Drugless Physicians, which evidently was not intended for us. We take it for granted that none of our readers will be dupes enough to pay this assessment of \$25.00. It is about the worst fraud in the way of medical legislation that has been attempted in this state in recent times. The chief danger is that medical men may regard it as such a bald attempt to pass vicious medical legislation that they will pay no attention to it, while the army of quacks and such like champion the bill with a liberal supply of money. The letter and its enclosure follow:

San Francisco, Cal.,
Sept. 15, 1914.

Dear Doctor and Friend:

The State Board of Directors of the American Association of Drugless Physicians, having made an estimate of the work still absolutely necessary to be performed in order to carry our Bill on November 3rd, have set forth in detail for your inspection a list of the same. There is much more that we would like to do which we know would be of great advantage to our campaign, but we are trying to make this fight as economically as we possibly can consistent with reasonable hope of success.

We are fully conscious that it would not be in conformity with our Constitution and By-Laws to levy an assessment without placing the matter up to the membership for referendum vote. We, the State Board of Directors, have been assessing ourselves regularly for the past year and are now assessing ourselves \$25.00 each, and we ask you to assess yourself the same amount, (\$25.00.) Send it to Headquarters, 601-2 Elkan Gunst Building, San Francisco, so that it will be in the hands

of our Treasurer not later than the 1st day of October. This is an imperative call of need. It is positively up to you whether the State Board of Directors will receive sufficient support to do this work. If we get the money, we will make things hum from now until election day. If we do not get it and our Bill does not carry, you must feel yourself proportionately responsible for the failure. The A. M. A. are putting up \$60,000.00 to defeat us. If the State Board of Directors can get dimes to their dollars, we can beat them. The reason why we can do so is that we all work for nothing and put up our money besides, while the A. M. A. pay big for everything they get done.

Don't say you can't get \$25.00. Remember that your professional life is at stake. Now, Doctor, if you contribute your share, the \$25.00, you can be absolutely assured of the success of this Bill, which means a license to you.

Yours very truly,
STATE BOARD OF DIRECTORS,
A.A.D.P.,
GEO. D. GILLESPIE, Pres.

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5. Cards bearing list of reasons why, to be distributed all over the State..... 300.00
6. Large posters on bill boards in principal cities, during last month of campaign....1500.00

Respectfully submitted,

STATE BOARD OF DIRECTORS,

A.A.D.P.,

GEO. D. GILLESPIE, Pres.

LETTER FROM DR. SOILAND.

The following letter from Dr. Soiland was delayed until too late for our September issue. The Doctor is back from the troublous region, but the letter depicts Norwegian conditions so well that we give it space at this belated date:

Stavanger, Norway, Aug. 4, 1914.

This city, the third largest in Norway, with a population of 45,000, nestles in the protecting arms of the Stavanger Fjord and is the first port of call of nearly all English, French and German vessels. Every foot of ground in and about this city is historic, and one can find many marks left by the Vikings in the days when might was right. Near by is the last battleground of Harold the Fairhaired, of whom the Sagas say did not clip hair nor beard until he had conquered all minor kings of Norway. Not far removed from the narrow and cobblestoned city streets lies a building that seems singularly out of place, namely, the City or Commune Hospital, a structure which would do credit to any large American or European city. Here one finds a surgeon chief of staff, Dr. A. Cappelen, who goes about his work with the same degree of competency and vigor that would charac-

terize the most advanced American operator. One morning's work which the writer was permitted to attend consisted briefly of one enucleation of eye for acute glaucoma, one double herniotomy under local anesthesia, one resection of knee, one fixation of kidney, one perforating ulcer of stomach, and two uterine cases. Dr. Cappelen works practically alone. Two internes are of minor assistance with instruments and dressings, while a hospital nurse is trained to etherize patients. The main building has the usual features of modern institutions with separate wards for men and women; also a large number of individual rooms. The chemical and microscopical laboratories are well equipped, and in the hands of competent operators. The Rontgen laboratory contains the latest type continental transformer and is in daily use. In suitable cases radium is also employed. The enclosed card gives a fair idea of the hospital. The other card depicts a typical Norse Tubercular Sanitarium. This is situated on an elevation of about 5000 feet in Eastern Norway, away from the salt water and among mountain fir and pine, with beautiful placid lakes and tumbling waterfalls in the immediate neighborhood. We spent a day with Dr. Holmboe, who has charge of this institution, called Mesnaliens Knosted. About 150 patients are now in the place undergoing treatment which, as far as could be learned, is practically identical with that of other advanced institutions. Tuberculin is generally, but very carefully, employed. Instead of the usual three large meals, six smaller meals are given at regular intervals, with stated periods of rest in the open air on perfectly horizontal and rather hard couches. Again here the Rontgen rays are in demand and plates are made from time to time to note the patient's progress.

We leave in a few days to again

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visit the Finsen Institute in Denmark. provided the war situation does not become too critical. The outlook in Europe today is ominous and men high in military and naval circles admit that never in modern history has a general European war appeared so imminent. We are at present on the south shore of Norway and can plainly see the North Sea practice maneuvers of different war vessels. One day the

German fleet will sail by, then the next day a large English fleet, and occasionally a few Norwegian cruisers.

That civilized nations must have recourse to arms and bloodshed to settle their differences passes all understanding, but from today's telegrams it seems that Austria and Servia have already engaged in battle, and the opinion is that if Russia assists Servia all the big nations will be involved.

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MISCELLANEOUS.

CANCER DEATH RATE IN AMERICAN CITIES.

That there is need of the national movement to check the death rate from cancer which has been inaugurated under the direction of the American Society for the Control of Cancer is indicated by the figures of mortality from this disease in 1913. The statistics of our seven largest cities, recently tabulated, show that in that year the cancer death rate in each case was the highest on record. For New York City the rate was 82 per 100,000 of the population, against an average of 79 for the last five years; for Boston 118, against an average of 110; for Pittsburgh 79, against an average of 70; for Baltimore 105, against an average of 94; for Chicago 86, against an average of 81; for Philadelphia 95, against an average of 88; for St. Louis 95, against an average of 85. The combined cancer death rate for the seven cities was 89 per 100,000 of population for 1913, against a combined average of 83 for the last five years.

It is held by many that the recorded cancer death rate does not mean an actual increase of the disease to the extent indicated. According to this view improvements in the diagnosis of hitherto obscure diseases has caused cancer to be much more frequently recognized and recorded. Yet these figures of 1913 as compared with the average for the last five years, when we have presumably been enjoying the results of this greatly improved medical technique must be considered most significant, and it is hard to believe that the increase is due solely to greater accuracy of diagnosis.

CO-OPERATION OF NURSES.

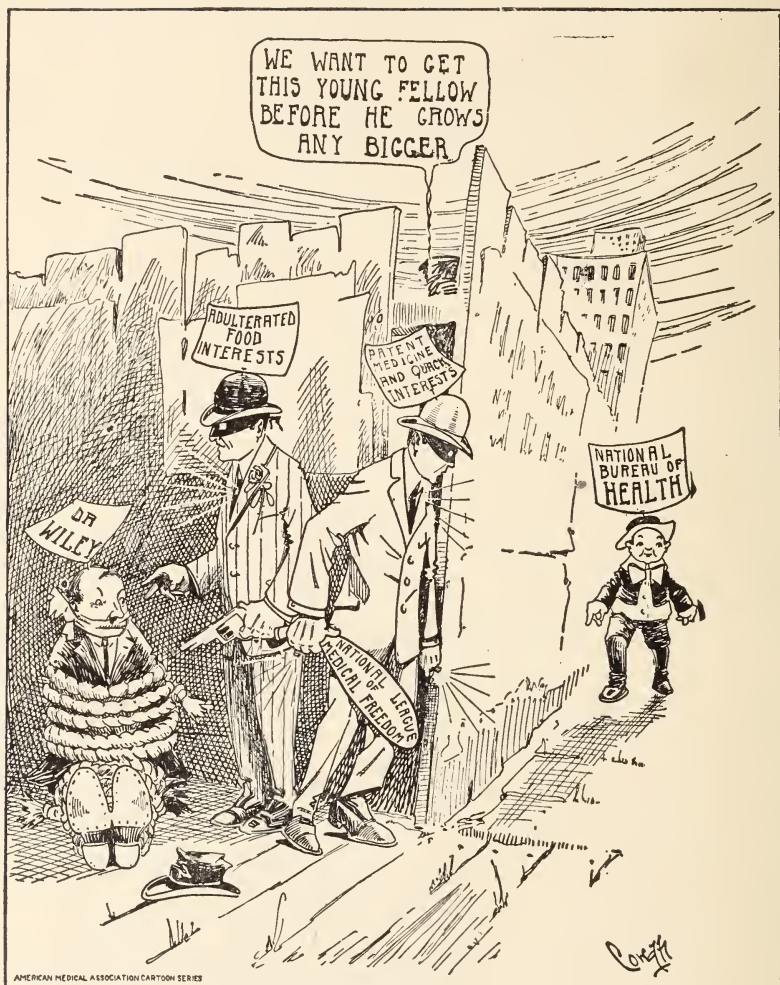
The Cancer Society has recently made special efforts to enlist the co-operation of nurses and nurses' organizations in its work. It is believed that the instruction of nurses as to the essential

facts in regard to cancer, particularly in women, will be of special value in leading to a more general dissemination of information in regard to the symptoms, diagnosis, treatment and prevention of this disease and the great importance of early recognition and operation. A circular letter was sent to all nurses' training schools, clubs and settlements in New York City asking that lectures to nurses on this subject be arranged. Favorable responses were received and recently the first of a series of meetings and lectures for nurses was held at the Henry Street Settlement, of which Miss Lillian D. Wald is head worker. About eighty nurses of the settlement staff were present. Another meeting will be held in May for the benefit of the several hundred visiting nurses of the New York City Department of Health.

These facts have been submitted by the Cancer Society to the three national nursing organizations now meeting in joint convention at St. Louis, namely: The American Nurses' Association, The National League of Nursing Education, and the National Organization for Public Health Nursing, and the official co-operation of the nursing profession throughout the country is hoped for.

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IT'S THE SAME OLD GANG

SOUTHERN CALIFORNIA PRACTITIONER

Vol. XXIX.

LOS ANGELES, NOVEMBER, 1914.

No. 10

Editor,
DR. GEO. E. MALSBARY.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Elbert Wing, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Kaspar Pischel, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed.

HEBOSTEOTOMY.*

BY FRANK C. AINLEY, M.D., LOS ANGELES.

Hebosteotomy and pubiotomy are terms applied to the operation performed to obtain a temporary enlargement of the pelvis by severing the pubic bone, to one side of the symphysis pubis, in contradistinction to symphyseotomy or the severing of the pelvic ring at the symphyseal joint.

HISTORY—In 1893 Gigli stated that from a surgical point of view there were two serious fallacies in the operation of symphyseotomy. First, the wound through the cartilage was very prone to infection and healed slowly, and second, the incision in the mid-line by depriving the urethra and bladder of their natural support, exposed these structures to serious injury during the delivery of the child. To overcome these difficulties he suggested that the incision be made through the pubic bone itself, to one side of the symphysis as he held that the bone wound was less liable to infection, and would heal more readily while its lateral position would avoid interference with the attachments of the urethra and bladder

and thus diminish greatly the possibility of their injury. In order to sever the bone he invented the flexible wire saw, which is generally known by his name.

Gigli did not perform the operation until 1902, but his suggestion was put into practice by Bonard, who first performed it in 1897.

TECHNIQUE—Originally the operation was done by the open method, the anterior surface of the bone being exposed by an oblique incision, beginning slightly above the inner margin of the pubic spine and extending to the middle of the outer part of the labium majus.

At the present time three methods are available, the open method of Gigli, the entirely subcutaneous method employed by Bumm and by Leopold and the partially subcutaneous method of Döderlein.

As the last mentioned is the method which I have employed I shall describe its technique in detail.

After emptying the rectum and shav-

*Read before the Los Angeles Obstetrical Society, October 13, 1914.

ing the lower abdomen and pubic region, the patient is brought to the edge of the table, prepared for operation in the usual manner and catheterized. The legs are held by assistants. The birth canal is next well dilated with the hand. An incision extending 2.5 centimeters inward from the pubic spine is then made just above the upper margin of the pubic bone, and the tissues cut through down to it. After incising the periosteum, a finger is passed into the wound and separates the tissues from the posterior surface of the bone. This precaution lessens the possibility of injuring the bladder and urethra. Then a Döderlein needle is carried down along the posterior surface of the bone until its inferior margin is reached, when its handle is depressed in such a manner that its tip can be felt through the upper and outer part of the labium majus. A small incision is made over the projection, through which the tip of the instrument is pushed. To it one end of the saw is attached, and is drawn into position as the instrument is withdrawn through the upper wound. The handles are then attached to the saw and a few movements suffice to sever the bone. Care should be taken that the bone is severed in the desired direction, and the movements continued until the saw moves freely beneath the skin.

In many cases the ends of the bone gape for two or three centimeters as soon as the section is complete; but when all the ligamentary structures have not been divided, this does not occur until traction is made upon the child. Upon withdrawing the saw, blood gushes freely from both wounds, but this is largely venous haemorrhage and is usually readily controlled by firm pressure with gauze sponges. As soon as the bleeding is checked, the child should be delivered by forceps or version. If proper care is taken in dilating the birth canal with hand before

beginning the operation, by making horizontal instead of upward traction when delivering the head and by avoiding undue violence at this stage, deep vaginal tears can be largely avoided. As traction is made, the ends of the bone will gape more widely, but a separation of more than five or six centimeters should be avoided by having the assistants make firm pressure upon the thighs. While waiting for separation of the placenta, a small drain should be brought through the opening in the labium majus, and the upper wound sutured. After delivery the patient is cleaned up, a sterile dressing applied over the upper wound, and a long strip of adhesive plaster four to six inches wide passed around the body, so as to make firm and equal pressure over the sides of the pelvis and upper part of the thighs.

EFFECT OF THE OPERATION—

The patient is put to bed on a Bradford frame for convenience in handling. The after-treatment of cases of hebosteotomy is as a rule not troublesome. Convalescence in general is very satisfactory, and the patients complain of but little pain or discomfort. In many cases there is considerable oedema about the vulva. Catheterization usually is not necessary.

The patient usually begins to move freely during the first few days, is able to leave the bed during the third week, locomotion soon returns and she is able to walk out of the hospital during the fourth or fifth week. Healing of the bone wound in the cases which I have seen occurred more frequently by fibrous than by bony union; this however, appears to have no effect upon locomotion. Moreover, the occurrence of fibrous union sometimes leads to a slight enlargement of the pelvic diameters, which when accentuated in a subsequent pregnancy by the softening and relaxation incident to the increased hyperaemia attending that condition,

may occasionally permit spontaneous labor, although such an outcome cannot always be expected. A permanent enlargement following hebstectomy is especially likely to occur in the outlet measurements of cases of funnel pelvis. When the pubic bone is cut through, owing to the structure of the sacro-iliac joints, the cut ends flare out and at the same time become depressed downward, resulting in an increased capacity of the pelvic canal, particularly in its transverse and oblique, and less so in its antero-posterior diameters.

It is usually stated that the conjugata vera becomes two millimeters longer for each centimeter of separation of the cut ends of the pubic bone. As the latter amounts to six or six and a half centimeters without injury to the sacro-iliac joints, the increase would aggregate 12 or 13 millimeters.

This, however, does not represent the actual enlargement of the superior strait from an obstetrical point of view, for one of the parental bosses fits into the opening between the gaping ends of bone, thereby considerably increasing the space available for the passage of the head. It will be seen from this that the position of the child's head will influence the operator in determining whether the bone will be severed on the right or left side. It has been calculated that when the pubic bones gape six or seven centimeters the area of the superior strait is increased by one-half.

It is commonly stated that difficulty in locomotion follows this operation. Although this may be true if the sacro-iliac joints are injured, it will rarely follow if care is taken that the cut ends of the pubic bone do not gape more than five to six centimeters, as experience has shown that this amount of separation rarely causes injury to the sacro-iliac joints.

INDICATIONS — Hebstectomy is performed in the interest of the child

and is contra-indicated when it is dead, or the conjugata vera measures seven centimeters or less. In the so-called "border line" cases with a conjugata vera of 7.5 to 9.5 centimeters, the operation comes into competition with, 1—Caesarean Section; 2—premature induction of labor; 3—high forceps; 4—version; and 5—craniotomy on the living child. Experience shows that 80% of cases belonging to this group terminate spontaneously when given the benefit of the test of labor.

1—Caesarean Section: When undertaken at the end of pregnancy or during the first hours of labor offers a mortality of only one or two per cent. When performed at this time in cases of moderately contracted pelvis at least 80 out of each 100 women who would otherwise deliver themselves spontaneously are subjected to the risk and discomfort of the operation.

Caesarean Section performed after the test of labor results in a maternal mortality of 10 or more per cent. Hebstectomy when performed after the patient has been subjected to the test of labor, offers a maternal mortality of about 2%, and a foetal mortality which should be only slightly, if any, higher than that of Caesarean Section when performed under similar conditions. However, when the child is unusually large, or when the past history of the patient is such as to make it fairly probable that labor must be ended artificially, primary Caesarean Section should be done at the end of pregnancy.

2—Induction of Premature Labor. In moderate degrees of pelvic deformity this operation has a maternal mortality of about 1 per cent. and a morbidity of 16 to 33 per cent.

Statistics show that in large series of cases there is an immediate foetal mortality of 15 to 20 per cent., and that an additional 15 to 30 per cent. of those born alive succumb before leav-

ing the hospital. Experience also shows that the death rate during the first year among children delivered by this method is considerably higher than among children born at term.

Since 80 per cent. of cases with moderately contracted pelvis if allowed to go to term will terminate spontaneously, it is evident that the induction of premature labor in those cases results in the unnecessary interruption of pregnancy by operative methods four times out of five.

3—Forceps. The employment of high forceps is contra-indicated in contracted pelvis when the head is freely movable above the superior strait. If the head becomes well moulded and fixed at the pelvic brim the tentative application of forceps is sometimes justifiable, provided brutal traction is not made. If the head does not follow a few moderate tractions, the forceps should be removed and delivery effected in some other manner.

Forceps applied to the head at the pelvic brim in the presence of moderately contracted pelvis, has a direct maternal mortality of from 3 to 5 per cent., a maternal morbidity of from 20 to 30 per cent. and a foetal mortality from 30 to 50 per cent.

4—Prophylactic Version. This operation when performed at the most favorable time, just after the rupture of the membranes, does away with the possibility of spontaneous labor and converts all into operative cases. Although the maternal mortality is not high, the foetal mortality is 25 per cent. or higher.

5—Craniotomy. There is a general belief that craniotomy is unattended by maternal mortality. Statistics show, however, a maternal mortality of 7 to 16 per cent. and a morbidity of 22 to 30 per cent. Although craniotomy is frequently done as a secondary operation, after failure to deliver by other methods, and when the patient is al-

ready infected and in bad condition, and although the results are better when the cases are in good condition, nevertheless these figures would indicate that the operation is not devoid of danger to the mother. The foetal mortality is of course 100 per cent.

PROGNOSIS—Maier in 1907 collected from the literature 267 cases of Hebosteotomy with a maternal mortality of 5.6 per cent.

Schläfle in 1909 collected 700 cases with a maternal mortality of 4.82 and a foetal mortality between 9 and 10 per cent.

Doerderlein states that in 321 operations performed in seven German clinics up to 1910 the mortality was 1.8 per cent.

R. Roemer collected 300 cases from the literature of 1909 to 1911, with a gross maternal mortality of 2.66 and a mortality resulting from the operation alone of 1.7 per cent. In this series there was a gross foetal mortality of 6.66 per cent. and a foetal mortality dependent on the operation alone of 5 per cent.

It would appear from a comparison of these results, that with the advance in our experience with the operation, and particularly with an increased knowledge of its indications and limitations, the maternal mortality has fallen from 5 per cent. to less than 2 per cent. and the foetal mortality from nearly 10 per cent. to 5 per cent.

This is particularly striking when one considers that these statistics are based upon the results of many operators, many of whom had had little experience with the operation, the statistics of Schläfle being based upon the results of 142 operators.

Following the expectant treatment, and employing Caesarean Section or Hebosteotomy when indicated, 829 cases of contracted pelvis of all grades were treated in the clinic of Professor J. Whitridge Williams, in Baltimore, up

to July, 1910, and 74.76 per cent. of the patients were delivered spontaneously. Three-quarters of the operations were necessary on account of the pelvic contraction, while the remaining quarter were performed for nonpelvic indications; 90.3 per cent. of the children left the clinic in good condition, and upon deducting the cases in which the child was dead at the time of admission of the patient, or died from such extraneous causes as syphilis, bronchopneumonia, etc., the net foetal mortality due to pelvic contraction was 4 per cent.

In this clinic, since 1906, Hebosteotomy has been performed a total of 44 times by 9 operators. There have been no maternal deaths. Of the children 6 were born dead and 5 more died before leaving the hospital. Seven foetal deaths or 15.9 per cent. can be charged to the operation.

The writer was present at 20 of these operations, 14 times as assistant and 6 times as operator. The cases reported in this paper having been done while serving as resident obstetrician in the Johns Hopkins Hospital. These cases are included in the larger series of Professor Williams and I am indebted to him for the privilege of reporting them to this society.

CASE HISTORIES.

Case I.—Wescott. Black, aged sixteen years, o-para, pelvis generally contracted funnel; measurements, 24.5, 26.5, 31, 19, 10.75, and 9 cm. Pubic arch narrow, tubers 7½ cm. Child in R. O. P.

Patient had slight pains three days. On admission the membranes were bulging; cervix completely dilated, head freely movable at superior strait. On account of the history of prolonged labor and the fact that the child seemed to be large, Hebosteotomy was decided upon.

Sept. 16, 1909—Typical left-side Hebosteotomy. Very little hemorrhage. Scanzoni application of forceps; easy

extraction; bones separated about 5 cm. Communicating vaginal tear in left sulcus 6 to 7 cm. long closed with catgut. Slight perineal laceration, two sutures.

Puerperium febrile, but otherwise satisfactory; temperature 103.2 on the tenth day. Gonococci in uterine lochia. Not catheterized. Patient out of bed on twentieth day; left hospital on 29th day. On discharge the Hebosteotomy wound was excellent; on anterior surface of pubic bone a slight furrow, with a notch at its lower end; posterior surface smooth; marked motility on passive movement; locomotion excellent and without pain. Uterus retroflexed, movable, well involved; perineum well healed.

The male child was born somewhat asphyxiated, but was readily resuscitated. Weighed 3,700 grams at birth and 3,630 on discharge. Mixed feeding. Head measurements, 13.5, 12, 9.75, 9.25, and 8 cm.

No subsequent note.

CASE II.—Jackson, black, aged 25 years. One difficult but spontaneous labor March, 1904. Pelvis generally contracted, rachitic, measurements, 23.5, 24, 28, 17, and 10 cm. Pubic arch normal; tubers 13 cm.

The patient was seen by the outpatient department twenty hours after the onset of labor. The membranes ruptured spontaneously an hour or so later, and as the head did not engage she was sent to the hospital. On admission the head was in R. O. P. above the superior strait; severe and frequent pains.

Sept. 18, 1909.—Hebosteotomy on the left side five hours after rupture of the membranes. Operation easy. Head rotated manually to R. O. T., easy forceps delivery, during which the ends of the bone gaped for 3 cm. Perineum or vagina not torn.

Convalescence most satisfactory, no discomfort; highest temperature 100.

Patient turned spontaneously on her side the night of the operation, and in the absence of the nurse, on the fifth day got out of bed and took a few steps, but suffered no ill effects from it. Catheterization not necessary. Walked without difficulty at the end of the second week and was discharged on the twenty-sixth day. At that time there was no trace of the bone wound on either surface of the pubis, but shallow notches were felt on its upper and lower margins. Slight motility on passive movement. Genitalia in excellent condition. The child weighed 2,860 grams at birth, 3,350 on discharge. Suckle by mother. Head measurements, 13.25, 11.25, 9.75, 9.5, and 8 cm.

Subsequent note, Feb. 3rd, 1910.—Patient reports that she walks as well and works as hard as at any time in her life, and suffers no pain or discomfort. On examination the genitalia are normal; no thickening at site of section, but a shallow depression marks its situation on the anterior surface, while nothing can be felt posteriorly. Distinct motility on passive movements. Pelvic measurements indicate that the diagonal conjugate had become 0.75 cm. longer.

This patient has since had one spontaneous labor, and on Oct. 6th, 1914, was delivered of a 3,400 gram baby by Caesarean Section.

CASE III.—Thanner. White, aged 22 years, o-para. Simple flat pelvis, 25.75, 27, 31.5, 18 and 9.75 cm. Pubic arch fair, tubera ischii 9 cm. Patient fell into labor at 8 a.m. Nov. 14, 1909, and entered the hospital that evening with the cervical canal obliterated and the external os admitting one finger. Child in L. O. T. overlapping the symphysis. The cervix became fully dilated after thirty-four hours of labor when the membranes were ruptured artificially. No advance after three hours of strong second-stage pains. Marked posterior parietal presentation with the

sagittal suture 2 cm. behind the symphysis.

Nov. 15, 1909.—Typical left-sided Heboosteotomy. Forceps extraction without difficulty, the bone wound gaping 4 cm. Moderate amount of bleeding; slight nick in fourchette and a tear 4 cm. long extending up the left anterior vaginal sulcus and communicating with bone wound. Repaired with catgut.

Puerperium was satisfactory, highest temperature 101.5 on the third day. Slight edema of labium majus. Imperfect healing of vaginal wound. Patient walked in the third week and was discharged in good condition on the thirtieth day, when she walked without difficulty. There was a distinct separation between the cut ends of the pubic bone of at least 1 cm. and definite motility on passive movement. Genitalia in excellent condition.

The male child weighed 2,830 grams at birth and 3,530 on discharge. Head measurements, 13, 11, 8.5, 8.25, and 7 cm.

Patient returned for inspection Jan. 24th, 1910. States that she has done very well. For some time after returning home she suffered considerable pain in the Heboosteotomy wound, which has gradually disappeared so that she can walk miles without difficulty. Pelvic examination negative, except for small retroverted uterus (lactation atrophy). Mensuration shows definite enlargement of pelvis. Conjugata diagonalis 10.75 instead of 9.75 cm., and transverse of outlet 10.5 instead of 9 cm., an increase of 1 and 1.5 cm. respectively.

This patient was delivered again July, 1913, by Caesarean Section.

CASE IV.—Wilson, black, aged 22 years, 1-para. Operative labor, the child dying the day afterward. Generally contracted rachitic pelvis, 25, 24.5, 29.5, 16, and 10.25 cm. Pubic arch fair; tubers 8.5 cm. The pelvis is also somewhat oblique owing to a rachitic kyphoscoliosis with a hump in the dor-

sal region and the convexity of scoliosis to the right side. Child L. O. A., not engaged. The membranes ruptured after fifteen hours of first-stage pains when the cervix was 5 cm. in diameter; seven hours later it was fully dilated. No engagement after two hours of strong second-stage pains with marked overlapping of the bones and a large caput. At the same time the temperature rose to 100.2 and the fetal pulse to nearly 160 per minute. In view of these conditions Hebstectomy was decided upon.

Jan. 12, 1910.—Left-side Hebstectomy. Easy high forceps, during which the cut ends of the bone separated 3 cm.; vagina not torn, and only a slight nick in the perineal mucosa. Convalescence most satisfactory, and the patient scarcely complained of pain at any time. Highest temperature 101.4 on the 5th day. Turned spontaneously on the third, sat up on the eleventh and, was out of bed on the twenty-first day. Slight edema of left labium majus which did not cause discomfort. Catheterization not necessary.

The child was somewhat asphyxiated, but was readily resuscitated. It weighed 3,025 grams at birth, and its head measured 12.5, 10.5, 9, 8.25, and 7 cm. Was suckled by mother.

On discharge on the twenty-seventh day, patient walked perfectly and suffered absolutely no discomfort of any kind. The genitalia were normal; no callus on either surface of the bone section, but slight motility on passive movement of the thigh. Menstruation of the pelvis indicated that permanent enlargement had not resulted.

This patient was delivered again April 15, 1912, by a Hebstectomy repeated on the same side.

CASE V.—Prophylactic placing of Gigli saw. Miller, white, o-para, aged 23 years. Pelvis generally contracted,

23, 27, 35, 19, and 11 cm.; tubera ischii 9 cm.

The patient was admitted to hospital after having been in labor nearly sixty hours, with the cervix fully dilated and a frank breech at the spines in L. S. P. Accurate palpation was impossible owing to the tense abdomen, though its large size suggested an unusually large child. The pains were poor for the next few hours and no advance occurred.

Thinking that the dystocia was probably due to the size of the child, I placed a Gigli saw in position on the left side before attempting extraction, so that Hebstectomy could be promptly performed if difficulty were experienced. The child, however, was readily extracted and was found to be small and slightly asphyxiated. Following its delivery an unruptured amniotic sac protruded from the cervix, and on rupturing it a second child was found lying R. S. A., which was readily extracted by Mauriceau's method. A second degree perineal tear resulted, which was repaired as well as the provisional Hebstectomy wound. The children were females and weighed 2,790 and 2,980 grams, respectively.

During the course of the night the patient complained of poor vision and five hours after delivery had a typical convulsion, which was followed by sixteen others. She recovered under the usual treatment, although for the first few days there was marked mental disturbance. The temperature rose to 103.4° on the 5th and fell to normal on the 10th day. The patient and her children were discharged on the nineteenth day in good condition.

No subsequent note.

CASE VI.—Repeated Hebstectomy. Strange, 1-para. Age 19 years. Generally contracted rachitic assimilation pelvis. Measurements at time of first operation, 21.75, 23, 27, 7.5, 16.5 and 9.5 cm. Pubic arch good and trans-

verse of outlet 10 cm. The patient was delivered April 15th, 1907, by Dr. F. C. Goldsborough, a typical left-sided Döderlein Hebosteotomy was done after the patient had been subjected to a trial of three hours in the second stage. A living child was delivered by high forceps. It weighed 2,450 grams and presented the following measurements: 13.75, 10.25, 9.5, 8.75, and 7.25 cm.

The puerperium was uneventful, highest temperature being 100.2. The patient was very comfortable, was out of bed the eighteenth day, walked the 23rd day and was discharged on the 35th day, when locomotion was excellent.

The patient was seen again in March, 1910, during the last month of her second pregnancy. The pelvic measurements were unchanged but there was definite motility at the Hebosteotomy wound and it was thought best to let her go into labor and do a second Hebosteotomy if necessary.

The child in L. O. A. posterior parietal presentation. Membranes ruptured spontaneously 15 minutes after the first pain. After thirty-two hours of severe pains the cervix was found completely dilated with the head at the superior strait, not fixed, but with marked caput, the posterior parietal bone presenting. An increase in the foetal heart from 36 to 42 to the quarter minute, indicated beginning asphyxiation of the child and Hebosteotomy was determined upon.

Operation.—April 11, 1910. Left-sided Hebosteotomy at the site of previous operation, scar tissue gave very little trouble, pubic spine easily found. Sawing gave sensation of fibrous or cartilaginous rather than bone tissue. Rather difficult high forceps delivery during which bone wound gaped 5 cm. communicating vaginal tear in left sulcus, closed with catgut. Slight perineal laceration.

Puerperium febrile, highest temperature 102.6 on eighth day due to infected

haematoma of left labium, aside from this the patient was very comfortable, and did not require catheterization. She was taken off Bradford frame on the 11th day, out of bed on the 20th, walked on the 21st and was discharged on the 30th day in excellent condition.

The female child was born somewhat asphyxiated but was readily resuscitated. Weighed 3,240 grams and presented the following measurements: 13.75, 11.5, 9, 9, 8.25.

In view of condition found at time of delivery it appears that tentative treatment in this case was an error as a primary. Caesarean Section would have been simpler. The child being 800 grams heavier than the previous one, and the fibrous tissue at the Hebosteotomy wound showed no sign of relaxation.

No subsequent note.

An analysis of the five cases in which the bone was severed shows no maternal and no foetal deaths, all of the mothers and infants leaving the hospital in good condition.

In one case the puerperium was afebrile, in four the highest temperature ranged 101.4 to 103.5. In the case in which the temperature was 103.5, gonococci were demonstrated in the uterine lochia.

The sawed tips of the pubic bone separated 3 centimeters in two cases, 4 centimeters in one and 5 centimeters in two.

Vaginal tears communicating with the bone wound resulted in three cases.

In no case was the bladder or urethra torn.

A haematoma of the labium occurred once.

Immediate healing of the wound was excellent in four cases, and imperfect in one, although the ultimate result was good in all.

Locomotion was temporarily disturbed in one case, but the permanent result was good in all cases.

Since coming to Los Angeles I have

continued to follow in my own practice the conservative line of treatment in cases of moderately contracted pelvis. Where no other complications arose, all patients have been allowed to go to term, and up to the present time I have not found it necessary to resort to major operative procedures, as in all cases the foetal head has entered the pelvis and the child has been delivered spontaneously or by the application of mild or low forceps.

CONCLUSIONS:—I. Hebosteotomy is contra-indicated when the conjugata vera is less than 7.5 centimeters. There must not be too great a disproportion between the size of the pelvis and the foetal head.

II.—It should not be done when the child is dead, as craniotomy is then the operation of choice.

III.—It should be regarded as a primary operation, and should not be employed in infected patients, or, after failure to deliver by other means.

IV.—The operation should be performed only in a well equipped hospital, and when done by operators familiar with the indications and technique should result in a maternal mortality not to exceed 2 per cent. and 90 to 95 per cent. of the children should be saved.

At least four trained assistants in addition to the operator are necessary in order to properly conduct the case.

V.—Care should be taken that the cut ends of the bone do not separate more than 5 or 6 centimeters.

VI.—The dangers of the operation are infection, deep tears, and haemorrhage.

Infection can be minimized by extreme care in asepsis, avoiding unnecessary examinations during labor, and by regarding the operation as a primary one.

Deep tears can be minimized by dilating the vaginal canal, with the hand, before severing the pubic bone; by carefully freeing the soft parts with the finger from the pubic bone before severing it; and by exerting horizontal instead of upward traction when extracting the child's head.

When these precautions are properly taken, injury to the bladder and urethra very rarely occur.

VII.—Prophylactic placing of the saw is indicated prior to breech extractions or versions from transverse presentations when it appears problematical, whether the head can pass through the pelvis, and the bone sawed through immediately after discovering that disproportion cannot be overcome.

VIII.—The operation is indicated in certain funnel-shaped pelvises.

IX.—The immediate results are more satisfactory in slightly built than in heavy women. The former suffer very little, while some of the latter experience some difficulty in locomotion for a few months after the operation.

X.—Although Hebosteotomy is not an ideal operation it has a distinct value in that in "border line" cases it enables one to observe an expectant attitude during the second stage and thus give nature every facility to overcome the disproportion, while at the same time it leaves the patient in such a condition that the operation may safely be undertaken if necessary.

1118 Brockman Bldg.

PYELITIS IN INFANTS.*

BY DR. P. V. K. JOHNSON, LOS ANGELES.

This is not a common disease but much more frequent than generally known, chiefly on account of not being

recognized as urine in infants is seldom examined. Pyelitis is an inflammation of the mucus membrane of the pelvis

*Read before the Los Angeles Obstetrical Society, Oct. 13, 1914.

of the kidney. Rarely there is a cystitis and there may be an inflammation of the ureter or kidney itself, pyelonephritis or even pyonephrosis. In all protracted or severe cases there is more or less kidney involvement, the extent of nephritis depending upon the cause and duration of the process.

The morbid anatomy shows no gross change in the pelvis, but there may be yellow streaks spreading up from the pelvis into the pyramids to the straight tubules. There may be purulent infiltration seen in cortex as small irregular yellow spots. As few cases come to autopsy the invasion of the pyramids and cortex probably occur only in fatal cases. Being easily overlooked it is often taken for other diseases and as spontaneous cure occurs in many acute cases, the presence of the real trouble is never recognized, and these cases most often treated for typhoid, malaria or tuberculous meningitis. The lesion usually unilateral, may be bilateral, or one side may clear up and later reappear in the other kidney.

The infection in most cases is due to the colon bacillus, but any of the pyogenic bacteria may be the cause. It may be an extension from perinephritis or from abscess of the kidney opening into the pelvis or a complication of scarlet or typhoid fever, diphtheria, etc. Renal calculi are often the cause of the local irritation. I have seen several small stones in the pelvis of the kidney in post-mortems on infants. Usually pyelitis is due to an ascending infection from the bladder but evidence of cystitis is slight and generally absent. As it occurs mostly in females under two years of age one can readily see how easily an infection could happen from the soiling of the vulva, especially in the diaper age. Vulvo-vaginitis is rarely present. Again it may be a direct infection from the bowel to the kidney or through the blood or lymph channels, especially when it occurs in males. There is generally a history of

some bowel disturbance before the illness.

A striking feature is the suddenness of the onset of the symptoms. The patient may suddenly have shivering or chill, which is rare in infants, the infant turning blue, becoming cold and faint, followed by high fever, vomiting may occur but generally absent. Attacks of blueness and collapse with high fever is suggestive of acute pyelitis in infants. The extreme misery and restlessness are very striking. The patient may be drowsy, almost comatose, complexion pale, skin hot and dry. Physical examination is negative except often in some cases there is discomfort upon general palpation, the child being generally very fretful and examination resented. There may be definite tenderness over front of abdomen, if on right side, simulating appendicitis. One such case was operated upon. May appear like acute cerebral condition, child drowsy, semi-comatose, mucopus on cornea, neck stiff and head slightly retracted, maybe squint and some slight convulsions, twitching of the limbs often mistaken for meningitis, especially tubercular. Unrecognized these are puzzling cases with a fever of 103 to 105 day after day, then going down to normal for days only to go up again and continue thus for weeks.

The blood shows little anaemia, except in protracted cases. There is generally marked leucocytosis with marked increase in polymorphonuclear cells.

The urine generally scant at first is highly acid, contains more or less albumen and pus in varying amounts and also various epithelial cells, may have red blood cells and hyaline, epithelial and granular casts in varying numbers. The Colon Bacillus generally found and in catheterized specimen generally in pure culture, though of course other bacteria may be the cause. Cases that have continued for weeks and become chronic look like marasmus, thin, emaciated, fretful, take food

badly, stools bad, and certainly look like some digestive disturbance, but the extreme fretfulness and misery suggests something more. Often can get history of previous febrile illness, maybe months ago, or a history of a good deal of irregular fever which was called teething or some digestive trouble. In older children it shows itself as a wasting disease and T. B. generally thought of, but the temperature curve is against T. B. and physical indications are negative except for pus in the urine. Diagnosis is easily overlooked, but the history of the sudden onset, the shivering or chill and the high, irregular fever and no definite physical signs, should make one suspect Pyelitis. Examination of the blood shows a leucocytosis and increase of polynuclear cells and the urine shows pus. This shows the importance of the simple clinical tests and how great a help they are in diagnosis.

The irregular fever and leucocytosis exclude typhoid and malaria fever or tuberculosis and the continuance of the fever after the intestinal intoxication relieved excludes the intestines as the source of infection. Patient looks very ill but the symptoms do not point to the location. Therefore the middle ear and urine should be examined as Otitis Media and Pyelitis in infancy can cause marked general without local symptoms.

These patients generally recover, especially if recognized early and properly treated. The danger is especially from nephritis which follows or complicates its progress, but in chronic cases the patient may die from exhaustion. The duration depends a good deal more upon the time the disease has existed unrecognized than upon the nature of the infection. Cases diagnosed early generally make prompt recovery. Where it has existed for weeks it takes months to recover and may reappear months afterwards. Urine should be frequently

examined for at least six months before pronouncing the case cured.

The treatment in most cases is simple and effective, the alkalinization of urine almost a specific, like relief in scurvy. Urotropin (hexamethylenamine) 10 to 15 grains in 24 hours for infant one year old, especially good in early cases, as most cases due to Colon Bacillus which is comparatively insusceptible to urotropin, an alkali like potassium citrate is better, especially in chronic cases, 30 to 40 grains being given in 24 hours, enough to make the urine alkaline.

Some cases are very obstinate and go on for weeks and here vaccines, preferably the antogenous variety, should be tried. Starting with 25 millions every 3 or 4 days, and rapidly increasing to 100 millions. If Pyonephrosis develops or if unilateral and kidney seriously involved, the case should be treated surgically.

N. B. Two years, 9 months. Sick 18 months. First child; normal birth; weight 8½ pounds. Nursed 5½ months, then put on bottle as mother became pregnant. Bowels never were normal, even while nursing, always too many stools. Father had chronic bowel trouble and mother also. Baby did well the first year, at end of which he weighed 23 pounds. At 14th month became ill, had fever and bowels began to move frequently. Child ate enamel off chairs and even some of the wood, as splinters were passed in the stools. Also ate dirt and anything he could get hold of. Had an irregular fever for weeks and has now been ill for 18 months. Physical examination shows child thin, emaciated, skin dry, scaly, loss of tone, eyes clear, respond to L. and A. Tongue slightly coated, throat negative, lungs and heart normal, abdomen moderately sunken, resents palpation, frets and fusses. Liver and spleen not enlarged, no hernia. Very slight enlargement of lymph glands, extremities thin, reflexes normal. Ears

normal. Child can sit up, but too weak to stand. P. T. and R. normal. Appetite poor, bowels loose, 8 to 18 stools per day. Mucus and undigested food. Examination shows no amoeba or other parasites. Blood shows Haem. 50%. W. B. C. 30,000, Poly. 76%, large lymph 1%, small lymph 23%, Eosin. 0. First specimen urine reported negative. Next day patient catheterized, urine acid, slight trace of albumen, no sugar, pus present, colon bacillus found. Patient put on citrate of soda and restricted diet. Stools are not so frequent and patient looks better, though it will be a long time before he is well.

L. H. Male, 4 years old. Birth history negative, no illness first two years, but last year has been subject to sore throat and some ear trouble. On April 10, 1913, suddenly became ill with headache, fever, prostration and constipation. He continued to have irregular fever and was seen by me two weeks later on April 23, 1913. A diag. of tuberculosis had been made, Moro test being positive; two months previously I had made a Von Pirquet, which was negative.

Patient was placed in hospital and physical examination showed patient well nourished, somewhat pale, throat clear, lungs normal, heart rapid, regular, no murmurs. Abdomen was slightly distended, liver and spleen not enlarged but an indefinite tenderness over left side, slight gen. glandular enlargement, extremities normal. T—100 3-5. P—120. R—32.

Report of urine was negative except for indican. Blood showed haemoglobin—70%. W. B. C. 23400. Poly. 57. Large .3. Small, 37.5. Trans. 1.5. Eosin, 1.0.

The blood examination rules out typhoid, tuberculosis and malaria and points to some purulent trouble somewhere. Ears examined and found normal. Temp. went up to 104 in the

afternoon and a surgeon was called in consultation but nothing definite made out.

Next day, April 24, 1913, another specimen of urine examined and many pus cells present and Colon Bacilli. Patient was put on urotropin and temp. came down rapidly, tenderness cleared up and in 12 days the urine was free from pus and remained so.

Betty R. Twelve months old. Birth history normal. Weighed 10 pounds at birth, nursed 8 months, never ill until last May, when had severe bronchitis which lasted 3 weeks. Then again 3 weeks ago had another attack of bronchitis, followed one week later by diarrhoea, as many as 10 stools per day. The cold and diarrhoea subsided, but five days ago suddenly became ill with high fever and considerable prostration. Seen on August 2nd, 1914, the fifth day of illness, temperature was then 104, pulse 140, respiration 42. She was very fretful and cross, and cried out as if in pain, but when left alone appeared drowsy. She was irritable and resented examination, which showed her well developed and nourished, very pale, eyes normal, anterior fontanelle open and level, skin dry and hot, mouth and throat negative, six teeth, lungs and heart normal, abdomen somewhat tender, especially in left side, but no rigidity. Liver and spleen not enlarged, extremities normal, no spasm and no paralysis. Knee jerks equal and normal, no enlargement of lymph nodes. Blood showed 80% Haem. W. B. C. 30,000, Poly. 88%. Widal negative, stools had only one in 24 hours, which was practically normal. Specimen urine not obtained until second day, and showed large amount of pus and colon bacillis. Patient put on urotropin and later potassium citrate, when symptoms rapidly subsided and in five days temperature came down to normal and remained there. Security Building.

ONE OF THE LESSER KNOWN STIGMATA.

BY CECIL E. REYNOLDS, M.D., D.H.P., LOS ANGELES, CAL.

The accompanying illustration shows a man aged 26 in the earliest diagnosable stage of hebephrenia holding up his left hand. For purposes of comparison the author's hand is inset above his. In the patient's hand will be seen a common and well recognized stigma mentioned by Stoddard and other alienists in the various text-books, viz: the double-jointed thumb. He has also loose metacarpo-phalangeal joints. But, although the text-books speak of the simian hand with flat palm and excessively numerous fine lines in the palm and of diminished internal rotation of the thumbs, etc., I have nowhere seen mention of excessive length of the ring



finger over the index. This patient shows the defect so well for a Caucasian (it is common in the negro) that it seemed a pity not to use it for illustration.

This patient was always good natured, but now his good nature is a little foolish. Also he has been complaining of apathy, lost ambition and absent sexual desire and power, and he attributes his "dopey" feeling to the machinations of his former employers, who, he says, put cocaine in his food. He states that the entire family in whose employment he was were cocaine fiends. For this reason he left their

employ and was for a short time with another family. However, he suspected these again of putting drugs in his food and so he left and has since been unemployed. His wife and mother shared his beliefs, but it was not difficult to argue them into a more reasonable view of the matter. The wife is a devotee of spiritualism. In recounting his suspicions the patient laughs a little in a self-conscious and half ashamed way, but in spite of recognizing that he is placing himself under suspicion of insanity he cannot be shaken in his beliefs any more than he can give any cogent reasons for holding them. There are no organic physical signs. Wassermann blood test negative. Deep reflexes exaggerated. Superficial reflexes minus. Vacant stare frequent. General hypochondriasis marked (his blood boils, his kidneys are bad, his urine is full of shreds, he has pain on the top of the head, etc., etc.)

The cranial measurements are as follows: Circumference, $21\frac{3}{4}$ inches; hat, $6\frac{7}{8}$; naso-occipital, $7\frac{1}{2}$; naso-occipital arc, 14; binauricular arc, 14; transverse, $5\frac{3}{4}$; cephalic index, 81 17-18, which puts him in the brachycephalic group; binauricular, $4\frac{3}{4}$; glabella to chin, $4\frac{3}{4}$.

Owing to the physical stigmata I fully expect that his trouble will be progressive. 506 Exchange Building.

Armour & Company announce that Pituitary Liquid, solution of the active principle of the posterior substance, is now standardized by the Roth method, described in his article in the July, 1914, number of *Journal of Pharmacology and Experimental Therapeutics*. Pituitary Liquid is of much service to the obstetrician as well as the general surgeon who has use for it in many operations where the intestines are exposed.

TWIN PREGNANCY AND FIBROIDS, A CASE REPORT.

BY DR. G. M. LAZARD, LOS ANGELES, CAL.

The following case would seem to indicate that the treatment of the labor in twin pregnancies, as usually given should be modified. It also brings into serious question the wisdom of a waiting policy in cases where fibroids are complicated by pregnancy. We are usually taught that it is proper to wait a considerable time after the birth of the first baby for the spontaneous expulsion of the second baby; also that fibroids in the upper uterine segment are out of harm's way and should not be disturbed during pregnancy except where some urgent indication is present.

At 9:00 p.m. of Aug. 9, 1914, I was telephoned to by a fellow practitioner who informed me that he was in attendance on a case of a 1 para, whom he had delivered of a baby at 7:00 p.m., that there was another baby and a total uterine inertia. He asked whether I thought it wise to wait for the spontaneous expulsion of the second baby. In reply to my queries, he said that her general condition was good, there was very little bleeding, the heart tones of the unborn babe were good. I said that in that case, I thought it perfectly proper and safe, and, in fact, better to wait for the uterus to regain its tone and spontaneously empty itself than to interfere; but that if there was any indication or urgency for the termination of the labor, it would be a simple matter to do a version and extraction as the parts were thoroughly dilated by the delivery of the first baby. He concluded to wait a while longer and see if spontaneous labor would not occur. At about 10:15 p.m. he again phoned me that no progress was being made and that he was taking the patient to the hospital and asked me to see her there with him. They arrived

about 11:15 p.m., and I immediately examined the patient. She was dyspnoeic, had a sighing respiration, asked to be fanned, was thirsty and had a weak pulse of about 140. On examination of the abdomen, I found a distended uterus, deflected to the right. I could not make out foetal parts distinctly, nor could I hear foetal heart tones, which the doctor informed me he had heard before leaving the patient's house. On examining, after I did, he could not detect the foetal heart tones.

On the lower left side of the uterus, there was a large mass which protruded from the uterine structure and about twice the size of my fist. This mass was very painful and gave the impression of being a fibroid. On my calling the attention of the attending doctor to it, he said that he had noticed it shortly after the birth of the first child. The patient was in extreme shock and was unquestionably suffering from concealed hemorrhage. The husband was informed of the gravity of the situation and of the necessity of immediately terminating the labor. Under light anaesthesia I introduced my hand and removed two or three large clots. I felt the edge of a placenta over to the left side of the os, and above it and to the right was the floating head of the second baby. Podalic version was immediately done and a male child was rather easily and rapidly extracted. The child was dead. As the placentae were not delivered within a short time, and in view of the extreme shock of the mother, I tried Crede expression and this failing, I did a manual extraction of the two separate placentae. When I felt the fundus to try the Crede I was surprised to find one portion of the uterus, the right horn, considerably more contracted and retracted

*The Los Angeles Obstetrical Society, October 13, 1914.

than the left horn, and between the two horns, I could lay my hand edgewise, demonstrating a deep sulcus between them. On introducing my hand into the uterus to deliver the placentae, I found the placenta of the first baby was lying in the left horn completely separated and rather near the os; to reach the second placenta, which was not yet detached, it was necessary to introduce my hand high up into the right horn and separate it from its attachment. A moderate laceration of the perineum was rapidly repaired and the patient who was in a very precarious condition was put to bed and given salt solution and stimulated in the hope of tiding her over. Notwithstanding all our efforts she died about one hour after delivery a victim of concealed hemorrhage.

It was my impression, after the delivery, that we had a uterus bicornis unicollis with a pregnancy in each horn and that after the birth of the first baby, which was in the left horn, had occurred, its placenta was prematurely separated and because of the second twin in the other horn, contraction and retraction of the left horn could not take place sufficiently to control the bleeding. This was disproven at the autopsy, where we found a normally developed uterus with an interstitial fibroid about the size of a kidney in the left horn and a smaller fibroid in the right horn. The larger fibroid was the one which I had felt during the examination. On cutting through this fibroid it was found to be necrotic and filled with about two ounces of necrotic pus. The pus cavity did not communicate with the endometrium nor with the serous surface.

What took place was a premature separation of the first placenta with concealed hemorrhage which was obscured by the presence of the second twin until the shock of the mother evidenced it. The hemorrhage and the presence of the fibroids were the cause

of the uterine inertia after the birth of the first baby. This would seem to indicate that it is not wise to wait too long after the birth of the first baby before interfering. I would not be understood as urging routine interference with the second baby if it is not immediately delivered after the first, but I do believe that such a patient should be even more closely watched than the ordinary case in the third stage of labor, as concealed hemorrhage is as likely to take place and if it does, nothing but completion of the delivery will control it.

The condition of the larger fibroid, necrotic degeneration with pus formation, leads one to speculate as to what would have been the outcome had the patient survived. She would have probably become septic and it would have probably been necessary to do a hysterectomy to save her life unless the necrotic fibroid had ruptured into the uterus and drained off with the lochial discharges. The doctors would have received the credit of having infected the patient. It does not seem probable that these changes could have occurred in the fibroid without giving considerable pain, yet this patient had not complained to her doctor of anything unusual during her pregnancy. Although the vast majority of fibroids complicated by pregnancy do not give rise to any trouble, yet one such a case causes us to pause and ask, "Is a fibroid in the upper uterine segment such a benign affair after all?" To me it will always be a condition which demands an unusual amount of careful watching and a source of considerable worry until the labor and puerperal period are safely over.

If the recital of this case results in our being put on our guard in the detection of a similar case, early enough so that proper measures can be taken to save a maternal life, our sad experience will not have been without its value.

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EDITORIAL

"TWILIGHT SLEEP."

From time immemorial attempts have been made to assuage the pains of parturition. Narcotic potions were administered by the ancients in labor. Theocritus states that they were given to Antigone. "Twilight sleep" has scarcely received greater attention at the hands of the lay press than did the introduction of the use of ether in obstetric practice by Sir James Y. Simpson, January 19, 1847, when he did a version and extraction under that anesthetic. In November, the same year, Simpson discovered the anesthetic properties of chloroform, which he afterwards used to the exclusion of ether in labor.

Early confidence in chloroform anesthesia in labor was due largely to the personal experience of Queen Victoria of England in 1853 and 1857, which led that form of anesthesia to be called anesthesia à la reine, the Queen's chloroform.

Obstetrics is a fertile field for the

use of general anesthetics. Nitrous oxid gas mixed with oxygen has been used more or less in labor since 1878. Its use preliminary to the administration of ether is not to be recommended in labor, since it produces intense carbonization of the blood that may injuriously affect the child.

Cocainization of the spinal cord, regional anesthesia, was invented by Corning and elaborated by Bier and Tuffier. The method has been used in labor but is not uniformly efficient nor are the effects sufficiently lasting. Besides, it is decidedly dangerous, which fact has limited its use in labor. Among the evil effects are headache, vomiting, hyperpyrexia, tachycardia, muscular spasms, drug intoxication, meningitis and peripheral necroses. Stoeckel recommended the injection of cocaine into the sacral canal, and Sellheim cocainized the pudic nerves through vaginal puncture. These methods have justly not proven popular. Local anesthetics, especially cocaine



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"I DRINK TO THE GENERAL DEATH OF THE WHOLE TABLE"

and belladonna, have been applied to the cervix, perineum and the rectum, but are of little value.

Hypnotism has been used in hysterical subjects. We are told that Apollo was born of Latona under such influence. Suggestion is very useful both during and after labor.

Alkaloidal anesthesia in labor has been used in various forms, the alkaloids most commonly employed being morpin, atropin, hyoscin and scopolamin.

Scopolamin-morphin anesthesia, christened by the Germans "Dämmer Schlaf" (twilight sleep) has recently been given considerable prominence by some lay publications. It is possible that the striking term "Twilight Sleep" may have been partly responsible for the attention given this form of anesthesia in the lay press. McClure's leading article on the subject gave much of such detail as one would expect in an article written by a medical man and published in a medical journal, the delicacy that usually surrounds the lying-in chamber in articles written for non-medical readers being conspicuous by its absence. The New York Medical Journal very justly held that it is objectionable to introduce into public thought matters concerning which most of the readers cannot be sufficiently well informed to hold definite opinions. A little knowledge and the early statements of enthusiasts cannot be rationally assimilated by individuals without the inhibition acquired by the physician through study and experience.

Twilight sleep (Dämmer Schlaf), under the term scopolamin-morphin anesthesia, was first recommended for surgical anesthesia by Schneiderlin, a neurologist, in 1899, and was recommended as an anesthetic in labor by Steinbüchel in 1902. Hatcher has collected an extensive literature on the subject. In America reports have been published by a large number of observers, among whom may be mentioned

Greene, Newall, Halpenny and Vrooman and Ries. Among the numerous European reporters mention may be made of Krönig, Gauss, Leopold, and Sir J. H. Croom. DeLee states in his text-book that his experience has been small and not favorable. More recently he says: "I saw, in Freiburg, in Prof. Krönig's own clinic, the so-called 'twilight sleep.' I was there three weeks and saw ten or twelve cases; five of these were instrumental—one craniotomy, four with forceps. One of the latter caused convulsion in the baby. All of the forceps cases suffered extensive lacerations. The impressions were distinctly unfavorable. I hold the method dangerous alike to mother and child. If generally used in obstetrics, it will much increase fetal mortality and cause great damage to the mothers. We have safer anesthetics and we can assuage the pain of labor more successfully than by this method."

In the Frauenkline at Freiburg, Germany, where Krönig and Gauss began the use of scopolamin-morphin anesthesia in obstetrics, it is not uncommon to receive women that have come from a great distance, repeatedly in some instances, for relief from the pains of labor. Thus far the method has not become popular outside of Freiburg. In America this form of anesthesia in labor has recently been adversely commented upon by Dr. Charles M. Greene, professor of obstetrics and gynecology in Harvard University; Dr. J. Whitredge Williams, professor of obstetrics, Johns Hopkins Medical School; Dr. Barton Cooke Hirst, professor of obstetrics, University of Pennsylvania; Dr. Joseph B. DeLee, professor of obstetrics, North Western University Medical School, and by Dr. Victor C. Vaughan, president of the American Medical Association.

The chief dangers of scopolamin-morphin anesthesia in obstetrics are, 1, asphyxia and narcosis of the child; 2, prolongation of labor and more fre-

quent necessity of forceps. Some report a greater number of post-partum hemorrhages, occasionally restless delirium, sometimes with convulsions and uncertain results. Lequeu, Avarffy and Strassman condemn the drugs outside of hospitals. Greene and many others would restrict their employment to nervous and unstable primiparae. All observers insist upon the closest observation of both patients.

One fact should not be lost sight of. In scopolamin-morphin anesthesia, the scopolamin is used to modify the action of the morphin, just as atropin is commonly used in combination with morphin. Whether scopolamin and hyoscin are identical need not concern us here. The "twilight sleep" is essentially an opium narcotization carried to the degree of amnesia. The recent use of narkophen, an opium product, does not alter this fact. It is a matter of common knowledge that opium is peculiarly injurious to the unstable nervous system of the infant. That this form of anesthesia should be followed by a high fetal mortality is not surprising. It would be safer to let the mother secure amnesia through free libations of champagne.

Following the popular exploitation in the lay press of the early enthusiastic reports of the Freiburg investigators, a legion of quacks and charlatans have announced that they are using the "twilight sleep" in childbirth, and many state that they have opened special institutions for this purpose. How helpful to these vampires must be such articles as those that have appeared upon "twilight sleep" in such publications as McClure's and The Ladies' World.

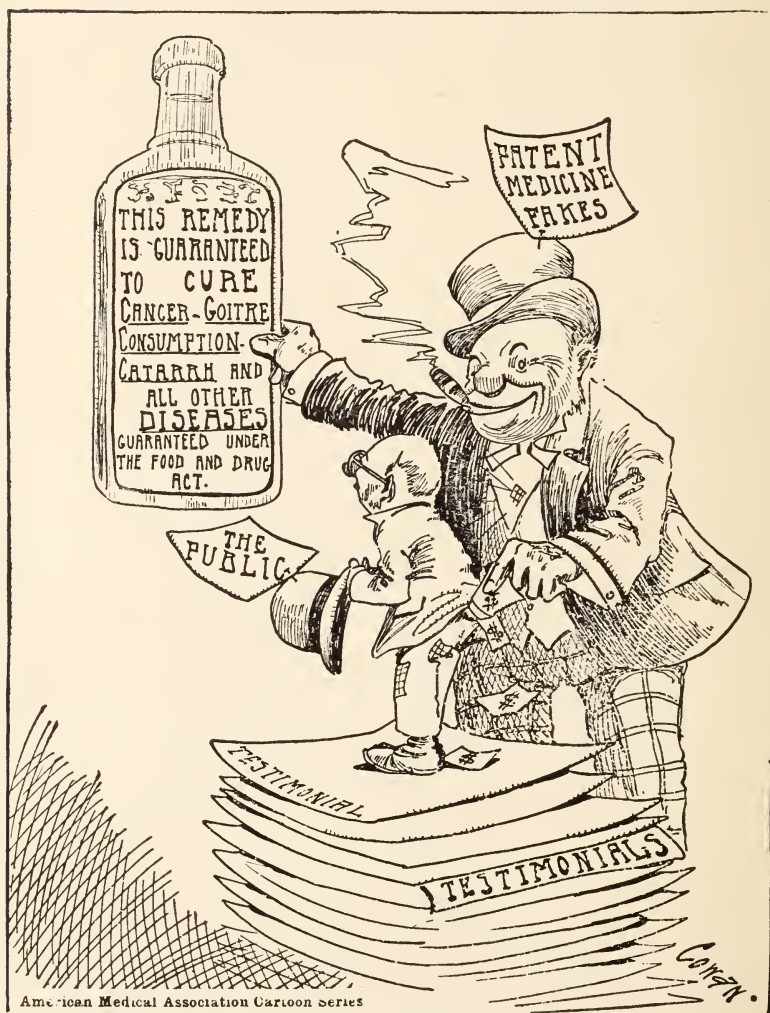
DR. REYNOLDS HONORED.

Dr. Cecil E. Reynolds, one of our Associate Editors, has been honored by being elected a Fellow of the Royal Institute of Public Health of London. It is a worthy honor worthily bestowed.

In England and in many of the older civilizations, greater importance is very justly attached to titles than is the practice in this country. Even in California, the land of culture, there is too great tendency to lose sight of titles, many of the less intelligent of the laity regarding all Doctors as alike, whether corn doctors, "drugless physicians," chiropractors (whatever that is,) naturapaths (whatever that is), or real Doctors. It is one of the most important duties of our profession to educate the laity in these matters and to stimulate a due regard for titles that have a real meaning, such as the one bestowed upon Dr. Reynolds.

DEAN KRESS AND THE GRADUATE SCHOOL.

Dr. George H. Kress, the Dean of the Graduate School of Medicine, that has been established by the University of California, at No. 737 North Broadway, Los Angeles, is modeling the course of this new school much upon the plan of the Harvard Graduate School. In establishing this school in this broad fashion the State will not only be adding increased facilities to the profession of the Southwest for graduate work, but at the same time make this Southern California department of the State University a central rallying ground for the profession of Los Angeles and Southern California or everything that stands for better professional attainment, and winning a more thorough understanding of good fellowship. We believe that the State University can depend on the co-operation of the reputable members of the profession in Southern California in this most laudable work. With the University of California giving us a high-class post-graduate school and the University of Southern California conducting an excellent under-graduate medical school, Los Angeles is certainly well supplied with means for medical education.



American Medical Association Cartoon Series

THE VALUE OF TESTIMONIALS

SOME RECENT METHODS IN THE DIAGNOSIS AND TREATMENT OF PULMONARY TUBER- CULOSIS.

A symposium on this subject was given before the Los Angeles County Medical Association, November 5, 1914. The subject was jointly covered by Dr. George E. Malsbary, Los Angeles, California; Dr. W. Warner Watkins, Phoenix, Arizona; Dr. Edward von Adelung, Oakland, California; and Mr. L. C. Shingle, Oakland, California. The chief points brought out were the value of Roentgenography as an aid in the more exact diagnosis of tuberculosis, and the use of artificial pneumothorax in selected cases. Radiography of the soft tissues is coming more and more to the front as the profession recognizes its possibilities. A method that will exactly locate cavities in the lung and reveal tubercles the size of a grain of wheat or even smaller, affords an aid in diagnosis that should not be neglected. Stereoscopic radiography of the chest presents the appearance of a huge crystal, in which the cavities and tubercles may be clearly seen in their exact relations as to position and depth, as well as size and shape, thus enabling us to be much more exact than was formerly possible.

Artificial pneumothorax was shown to be of especial value in those cases in which the tuberculosis is limited to one lobe or to one side of the chest. However, it is worthy of consideration in practically all cases that are not doing well under other treatment.

The evening's program was preceded by a luncheon at The Angelus, given by Dr. Malsbary in honor of the visiting gentlemen, at which the following were present in answer to formal invitations sent by telephone: Dr. W. Warner Watkins, Dr. Edward von Adelung, Mr. L. C. Shingle, Dr. C. C. Browning, Dr. George Kress, Dr. L. M. Powers, Dr. C. H. Whitman, Dr. F. M. Pottenger, Dr. Albert Soiland, Dr. Walter Lindley, Dr. William B. Bowman, Dr. Robert P. McReynolds, Dr. F. C. E. Mattison, Dr. John R. Haynes, Dr. E. Avery Newton, Dr. George Cole, Dr. Charles W. Bryson, Dr. F. L. Rogers and Dr. G. E. Malsbary.

We believe such interchange of courtesies should be encouraged. They will go far toward lessening sectionalism. We should remember that there is no boundary between the northern and southern portions of California, and as a profession, the line separating California and Arizona is very thin or altogether an imaginary line.

EDITORIAL NOTES

Dr. Hugo A. Kiefer has removed his office to 406 Brockman Building.

Dr. A. W. Swearingen of La Jolla has been spending several days in Los Angeles.

Dr. Chas. LeRoy Lowman has recently taken offices in the Brockman Building.

Dr. Mark Barton Smith has opened offices in Suite 617 and 618 Brockman Building.

Dr. Hugo A. Kiefer of Los Angeles has taken offices in the Brockman Building.

Dr. J. T. Dunn, formerly of Minnesota, has located in the Slavin Building, Pasadena.

The overwhelming defeat of the Drugless amendment shows that the people do have a limit.

Dr. L. G. Visscher has removed his office to Suite 1211 Baker-Detwiler Building, 412 West Sixth street.

Dr. A. Claude Magee announces the removal of his offices from Scripps Building to Suite 308 Watts Building.

Dr. Harold W. Wright, the Santa Barbara Neurologist, recently spent

several days with medical friends in Los Angeles.

On Saturdays at 11:30 there is a clinic (public) at the L. A. Psychopathic Hospital, given by the visiting staff, for all interested in mental and nervous disease.

There was only one death from typhoid fever in the city of Los Angeles during the month of August. This shows that the supply of water that comes to this city through the 250 mile aqueduct is very pure.

Dr. W. W. Beckett, medical director of the Pacific Mutual Life Insurance Company, and Dr. W. W. Hitchcock, medical director of the Occidental Life Insurance Company, have returned to Los Angeles after extended trips east on business connected with their official positions.

Dr. Ross Moore, amid wars and rumors of Zeppelin attacks, is quietly pursuing his studies in the National Hospital for the Paralyzed and Epileptic in London. Dr. Moore says: "You would be much interested to see how little the war affects the even tenor of this hospital."

A fine suite of three rooms for general practice and eye, ear, nose and throat work, all furnished and equipped, centrally located in good office building, may be rented while owner is away in the East for several months. Inquire of Mr. Josephs at the Vance Drug Co., Cor. 4th and Broadway.

Mr. and Mrs. Wm. Henry Gilbert announce the marriage of their daughter, Miss Bertha Douglas Gilbert to Mr. Lloyd Thomas Ford on Saturday, the tenth day of October. Mrs. Ford is one of the most highly esteemed young women in Los Angeles and is president of the alumnae association of the training school for nurses of the California Hospital.

The Shepard Sanatorium, formerly El Reposo, has been incorporated un-

der the laws of California for \$100,000. Officers, Dr. C. A. Shepard, president; W. R. Dickinson, vice-president; R. T. West, secretary-treasurer. Directors, E. C. Roy, Fred W. Morrison, W. R. Dickinson, R. T. West, C. A. Shepard. Numerous improvements have been planned and are under way to make this institution second to none in the West. Dr. Shepard will still be in charge as medical director and general manager.

Brownson House Orthopedic Dispensary, a free Dispensary for crippled and deformed children and adults, has been opened at Brownson House Settlement, 711 Jackson street. The clinic days are Monday and Thursday, 1 to 3 p.m. The medical and surgical staff is as follows: Chief of clinic, John Carling, M.D.; clinical assistant, Elizabeth M. Saphro, M.D.; laryngologist, Arnold Burkelman, M.D.; neurologist, James T. Fisher, M.D.; pathologist, Victor O. Saphro, M.D.; consulting physicians, J. M. McGarry, M. D., P. G. Cotter, M.D.

Two of the newer Los Angeles doctors were given a dinner in Alhambra Wednesday evening, October 21st, by the leading physicians of that growing suburb. They were Dr. Harry G. Watson, a stomach specialist, formerly of New York City, where he was long a co-worker with the distinguished Dr. Max Einhorn; and Dr. Frederick S. Holladay, who was a prominent practitioner in Tampico, Mex., until driven out by the war. Since then Dr. Holladay has been associated in medical electrical work with Dr. Wm. Benham Snow in New York, the famous editor and author of books on that subject. They have both taken offices in the Brockman Building.

In the Eleventh Annual Report of the Barlow Sanatorium just issued Dr. Walter C. Klotz, the resident physician, says: "The greatest need of the sanatorium and the one that has been em-

phasized repeatedly is a building for the medical department—a medical office, with examining rooms, throat room, medical record room and medical library; also better facilities for laboratory work and a waiting room for patients coming from outside to be examined. Among the needs in connection with the medical department, to be mentioned especially, is an X-ray apparatus. This would cost approximately one thousand dollars. The importance and value of this method of examination in the diagnosis of tuberculosis has been mentioned in another part of this report. In connection with the throat department a small electric sterilizer would be very useful.”

At the meeting of the Los Angeles County Medical Association held October 16th, the following new members were elected: Dr. A. F. Zimmerman, 1124 Black Bldg., Los Angeles; U. S. C., 1905; Endorsed by Drs. J. C. Brown and H. P. Barton. Dr. Robert V. Day, Wilcox Bldg., Los Angeles; U. of S. C., 1907; Endorsed by Drs. H. Bert. Ellis and Granville MacGowan. Dr. E. A. Trommald, 1117 Van Nuys Bldg., Los Angeles; Cooper Med. Coll., 1896; Endorsed by Drs. W. H. Dudley and Chas. H. Lowell. Dr. Chesley L. Evans, 501 Laughlin Bldg., Los Angeles; U. of C., 1912; Endorsed by Drs. Michael Creamer and J. E. Cowles. Dr. W. H. Smith, Long Beach Sanitarium, Long Beach, Cal.; Jefferson Med. Coll., 1907; Endorsed by Drs. R. S. Cummings and J. M. Brown. Dr. Edwin H. Hall, 612 Consolidated Realty Bldg., Los Angeles; Coll. of P. & S., U. S. C., 1908; Endorsed by Drs. Albert W. Moore and Raymond G. Taylor. Dr. E. Avery Newton, Marsh-Strong Bldg., Los Angeles; U. of Penn., 1902; Endorsed by Drs. Walter Lindley and Wm. L. Wills. Dr. Alfred R. Rogers, 410-16 Wright & Callender Bldg., Los Angeles; St. Louis College of P. & S., 1898; Endorsed by Drs. Chas. G. Foote and Ray Townsend.

Dr. R. A. Terry, 301 First National Bank Bldg., Long Beach, Cal.; Ind. U. School of Medicine, 1910; Endorsed by Drs. Robt. M. Dodsworth and W. L. Dickerson. Dr. W. H. Newman, Box 925, Long Beach, Cal.; Rush College, 1893; Endorsed by Drs. V. Ray Townsend and W. L. Dickerson. Dr. Edward H. Williams, 609 Exchange Bldg., Los Angeles; State Un. of Iowa, 1892; Endorsed by Drs. Geo. G. Hunter and Wm. H. Dudley. Dr. C. Gedrem Reum, 1701 W. Vernon Ave., Los Angeles; L. A. Dept., U. of C., 1912; Endorsed by Drs. J. H. Seymour and J. J. Van Kaathoven.

FOR SALE—One Scheidel-Western Standard 16-inch X-Ray Coil, together with mercury and electrolytic interrupters, rheostat, meters, X-Ray tube stand and shield, high-frequency resonator, etc., all in good condition, complete outfit for \$250.00; less than half cost. Address “X-Ray,” 622 Auditorium Bldg., Los Angeles, or phone F1810, Main 8565.

PHYSICIAN with established practice in Hawaii would like to correspond with a practitioner in California who would be willing to exchange fields half-yearly, turn-about. A good thing for the right man. Address, with age, qualifications, school and location, Physician, care “Practitioner,” 500 Auditorium Bldg., Los Angeles.

England has reduced the minimum height for recruits to the army to 5 feet 4 inches and the minimum measurement of the chest to 34½ inches.

We advertise only such goods as may be of value to you in your practice. You are doing yourself and your patients an injustice if you do not read our advertisements carefully.

BOOK REVIEWS

A MEDICAL DICTIONARY FOR NURSES. Giving the Definition, Pronunciation, and Derivation of Terms Used in Medicine, together with Supplementary Tables of Weights, Measures, Chemical Symbols, etc., Arranged with Special Reference to Use by Nurses. By Amy E. Pope, Graduate of the School of Nursing of the Presbyterian Hospital, in the City of New York; Special Diploma in Education from Teachers College, Columbia University, New York; Formerly Instructor in the School of Nursing, Presbyterian Hospital; Instructor in School of Nursing, St. Luke's Hospital, San Francisco, Cal. Author of "Essentials of Dietetics," "Quiz Book of Nursing," "Anatomy and Physiology for Nurses," with Anna Maxwell "Practical Nursing." G. P. Putnam's Sons, New York and London. The Knickerbocker Press, 1914. Price \$1.

We should think such a dictionary, adapted to the special requirements of nurses, would find a large field of usefulness. The author is a well known writer of text-books for nurses. It is a volume we take pleasure in recommending.

THE BALNEO-GYMNASTIC TREATMENT OF CHRONIC DISEASES OF THE HEART. By Professor Theodor Schott, M.D., Bad-Nauheim, Germany. With a Foreword by James M. Anders, M.D., LL.D., Professor of Medicine, Medico-Chirurgical College, Philadelphia. 191 pages with 87 illustrations, including 41 Gymnastic Poses. Philadelphia, P. Blakiston's & Son & Co., 1012 Walnut Street.

Regarding the employment of gymnastics, the following general regulations are given: (1) The movements should alternate with one another in such a manner that, according to their arrangement, new groups of muscles are continually being brought into activity. After the movements have taken place over the whole of the skeletal musculature they can eventually be repeated in several cycles if the patient still feels sufficiently fresh. In this way a one-sided fatigue is most effectively prevented. (2) This general activity of the skeletal muscles can be attained by means of a very simple geometrical arrangement of the movements. Usually we employ the following scheme:

(A) Movements of the extended arms in three vertical directions, one after another.

(a) Sagittal, toward the front from the position of downward extension, upward to near the temples and from there again downward.

(b) Frontal, laterally upward to the temples and backward.

(c) Horizontal, brought together and apart again in a horizontal direction.

(d) The fully extended arms are rotated on their axes outward and inward to the farthest extent, which includes pronation and supination.

(B) While with the free articulation of the shoulder-joint a selection of the directions of movements was necessary, the movements for the elbow-joint and wrist are determined by nature. Flexion and extension, with radial and ulnar abduction; the rotations have already been carried out under (A).

(C) Movements of the body, bending forward from as far back as the patient can bend and the reverse, side movements from the extreme left to the extreme right and vice versa, as well as rotation of the vertebral column on its axis, in both directions.

(D) The extended leg should be raised under resistance, straight forward and upward and again lowered against resistance; then again to the right and to the left and raised and lowered toward the back.

(E) The directions of movement for the knee-and-ankle-joint are also determined by nature.

It is not necessary to carry out all of the movements on each occasion.

(3) One can train up men to act as gymnastic operators in a very short time if they have sufficient conscientiousness and intelligence. Of course, they must previously have gained a certain amount of anatomic and physiologic knowledge. It is of advantage in

many cases to teach a member of the patient's family so that the sufferer can always have someone at hand.

The profession owes a debt of gratitude to Dr. Anders for his translation of this little worth-while volume by our eminent German confrere, Professor Schott of Bad-Nauheim.

ATMOSPHERIC AIR IN RELATION TO TUBERCULOSIS. (With 93 Plates.) By Guy Hinsdale, A.M., M.D., Hot Springs, Va.; Secretary of the American Climatological Association; Ex-President Pennsylvania Society for the Prevention of Tuberculosis; Fellow of the College of Physicians of Philadelphia; Associate Professor of Climatology, Medico-Chirurgical College; Member of the American Neurological Association; Fellow of the Royal Society of Medicine, Great Britain; Corresponding Member of the International Anti-Tuberculosis Association. Smithsonian Miscellaneous Collections. Volume 63, Number 1. Hodgkins Fund. (Publication 2254.) Published by the Smithsonian Institution, City of Washington, 1914.

An extraordinary amount of research has been carried out with reference to the atmospheric air during these later years. The whole theory of ventilation has been stated in new terms; the presence of ozone in the atmosphere, a subject that has always appealed to the popular fancy since its discovery, has been restudied and its physiologic action assigned a value different from that commonly ascribed to it; the properties of strong sunlight and Alpine air have been marshalled for the combat with surgical tuberculosis, particularly in children.

Physiologists in Europe and America have lately made most interesting studies of the blood at the higher altitudes and their observations are constantly throwing new light on the entire subject of aerotherapy, replacing old impressions and beliefs with a scientific basis on which we may confidently build.

There never was a time when the outdoor life and the accessories for the atmospheric treatment of all tuberculous persons were so well systematized and placed in harmony with the other

hygienic measures adopted for their cure.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH. Adopted during 1912 by Cities of the United States having a population of over 10,000 in 1910. United States Public Health Service, Rupert Blue, Surgeon-General.

The United States Public Health Service renders a valuable service to the country in the issuance of this volume, which is Reprint No. 199 from the Public Health Reports 1912-1913. It contains twenty-six references to Los Angeles ordinances. The arrangement is quite systematic, the various ordinances being grouped under appropriate headings.

THE TONSILS. Faucial, Lingual, and Pharyngeal with some account of the Posterior and Lateral Pharyngeal Nodules. By Harry A. Barnes, M.D., Instructor in Laryngology, Harvard Medical School; Surgeon in the Department for Diseases of the Nose and Throat, Boston Dispensary; Assistant Laryngologist, Massachusetts General Hospital; Member New England Laryngological and Otological Society; Member American Laryngological, Rhinological and Otological Society. Illustrated. St. Louis, C. V. Mosby Company, 1914.

This monograph on the Tonsil goes into the subject in a detailed and careful manner. It calls special attention to the tonsil as an avenue of general systemic infection, a subject that at the present time is given a great deal of attention by medical investigators. The volume will prove interesting to many besides the throat specialists. And any work by Barnes appeals to the men making a specialty of diseases of the throat.

MEDICAL JURISPRUDENCE. A Statement of the Law of Forensic Medicine. By Elmer D. Brothers, B.S., LL.B., Member of the Chicago Bar; Lecturer on Jurisprudence in the Medical and Dental Departments of the University of Illinois, and in John Marshall Law School, St. Louis. C. V. Mosby Company, 1914. Price \$3.

This is an up-to-date well condensed text-book, embodying those phases of medical jurisprudence that are most

interesting and instructive to the medical student and the practitioner. It is based on the teaching of the author, giving references for practically all that is presented, and contains a vast amount of information within the compass of three hundred pages.

HANDBOOK OF PHARMACOLOGY. By Charles W. Greene, A.B., A.M., Ph.D. Octavo, 420 pages, illustrated by 70 engravings in black and colors. Extra muslin, \$3.50 net. Wm. Wood & Co., Publishers, New York.

The strong argument for this volume is that it presents pure pharmacology. For the student's use it is therefore simpler, does not swamp the student in therapeutics which belongs to the practical course, does not confuse his attention with materia medica and the adaptation of dose to disease which he does not yet know. The book is well analyzed, presents condensed statements of action with many chapters closed by specific summaries—in fact in a pedagogical way it conserves the time of both student and teacher. On the other hand it is not without value to the practical physician in that it gives him the specific action of numerous individual drugs in easy and accessible form for his review and reference.

THE CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume III, Number IV. Octavo of 254 pages, 65 illustrations. Philadelphia and London W. B. Saunders Company, 1914. Published Bi-Monthly. Price per year: Paper, \$8.00; Cloth, \$12.00.

Looking over the three volumes of Murphy's Clinics, the work seems to show a decided improvement, apparently through greater personal interest in the work, either on the part of Dr. Murphy or the editor of the Clinics. It is well worthy of a place in the working library of every physician and surgeon engaged in active practice. We note that in the last article in this number of the Clinics, Dr. Murphy reports his second death from operation for the repair of postoperative ventral

hernia. That impresses us as a very low mortality.

THE PRACTICAL MEDICINE SERIES, Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Roger T. Vaughn, Ph.B., M.D.

VOLUME IV, GYNECOLOGY. Edited by Emilius C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Attending Obstetrician to Cook County Hospital.

VOLUME V, PEDIATRICS. Edited by Isaac A. Abt, M.D., Professor of Pediatrics, Northwestern University Medical School; Attending Physician Michael Reese Hospital.

ORTHOPEDIC SURGERY. Edited by John Ridlon, A.M., M.D., Professor of Orthopedic Surgery, Rush Medical College, with the collaboration of Charles A. Parker, M.D.

VOLUME VI, GENERAL MEDICINE. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, A.M., M.D., Professor of Medicine, Illinois Post-Graduate Medical School. Series 1914.

The series is published primarily for the general practitioner, at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire. Price Volume IV, \$1.35; Volume V, \$1.35; Volume VI, \$1.50. Price of the series of ten volumes, \$10.00. Chicago, The Year Book Publishers, 327 S LaSalle Street.

The busy physician will find here a brief resume of the recent literature on the part of medicine in which he is most interested. It is adapted alike to the requirements of the general practitioner and the specialist.

MANUAL OF BIOLOGICAL THERAPEUTICS.

A notable work on Biological Therapeutics has just been issued from the press of Parke, Davis & Co. The book is handsomely printed in large, clear type, on heavy enameled paper, and bound in cloth. It contains 174 pages of text, upwards of thirty full-page plates in color, and a number of half-tone illustrations in black and white, together with a comprehensive index. As its title suggests, it is a concise and practical treatise on biological therapeutics, and so replete with useful information that no practitioner should

miss the opportunity to secure a copy, especially in view of the fact that the publishers announce that the entire edition is to be distributed gratuitously to members of the medical profession, on individual application.

Something of the scope and value of the work may be inferred from this incomplete list of the subjects treated: Biology; Bacteria; Immunity; The Preparation and Uses of Sera; Antidiphtheric Serum; Concentrated Diphtheria Antitoxin; Allergic Reactions; Antitetanic Serum and Globulins; Antigonococcic Serum; Antimeningitic Serum; Antistreptococcic Serum; Bacterial Vaccines or Bacterins; The Opsonic Index and description of method of taking it; When Serums should be used and when Bacterial Vaccines are to be preferred; The various Bacterins and their Indications; Smallpox Vaccine; Pasteur Antirabic Vaccine; The Diagnosis of Typhoid Fever; The Agglutination Test without a Microscope;

The Agglutometer; Ehrlich's Diazo-Reaction in Typhoid Fever; Gonococcus Antigen; The Wassermann Reaction; Coley's Mixture; Coagulose or Hemostatic Ferment; Bacillus Lactis Bulgarius; Phylacogens, their Preparation and Mode of Use; Mixed Infection Phylacogen; Pneumonia Phylacogen; Gonorrhea Phylacogen; Erysipelas Phylacogen; Rheumatism Phylacogen; Typhoid Phylacogen; Tuberculins in Diagnosis and Treatment; Organotherapy; Thyroidectin and Thyroprotein; Thyroid and Thymus Glands; Adrenalin and Pituitrin; Corpora Lutea; The Biological Farm and the Research Laboratory.

To our physician friends we suggest the propriety of writing at once for a copy of this "Manual of Biological Therapeutics," addressing the request to Parke, Davis & Co. at their home office in Detroit, Michigan. It will not be amiss to mention this journal in writing.

SOCIETY REPORTS

THE LOS ANGELES OBSTETRICAL SOCIETY.

October 13, 1914.

TWIN PREGNANCY.*

By Dr. E. M. Lazard.

Dr. R. P. McReynolds: I would like to ask Dr. Lazard how long one should wait in twin pregnancies before interference after the birth of the first child. If I remember correctly the accepted teaching is that it should never be longer than an hour.

Dr. Lazard: That depends chiefly upon the condition of the mother and baby. Personally, if both are in good condition, I think it is better to wait than to rapidly empty an atonic uterus with the attendant danger of hemorrhage and subsequent trouble.

PYELITIS IN INFANCY.*

By Dr. P. V. K. Johnson.

Dr. T. P. Gerson: The condition described by the essayist is present in a much larger number of cases than many practitioners imagine, due largely to neglect to make these very important urine and blood examinations in these cases as a routine practice. The majority of these cases, of course, are found in girl babies. The loose stools bathe the vulvar parts and thus bring the cause of the conditions, which is usually the colon bacillus, in contact with the urethra, whence it finds its way to the bladder and up through the ureters. A European reporter has declared that his observation showed that

*Published in this issue of the Southern California Practitioner.

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one hundred per cent of these cases occur in girls. Dr. Holt found sixty per cent in girls. So I was surprised to hear the Doctor report that two of his cases were boys. As to the classification of these cases, a London physician has divided them into: 1, febrile cases, marked by malaise, anorexia, fever and general digestive disturbance, in which examination of the urine shows a few epithelial cells and pus, thus making the diagnosis. 2, The next group Dr. Gordon calls the pulmonary, because they resemble the onset of pneumonia. 3, The third type he includes under the heading cerebral, many of which have been diagnosed as tubercular meningitis. In every one of these types, the urine examination makes the diagnosis. 4, The fourth type is the abdominal type, in which pain is due to ulceration of the ureters. 5, The fifth type is the nephritic type, in which there is a large amount of pus in the urine. In that type the diagnosis is usually made even by physicians who are not very expert. I have had one case that persisted for a number of months. Although we gave urotropin, the temperature would run high. It would improve for a few days and then the attack would be repeated, probably due to the acid condition of the urine again being established. Then putting the patient on alkaline treatment, the temperature would come down.

Dr. Francis O. Yost: This is a very important subject. My attention was called to it practically a couple of years ago and I have watched out for these cases since. I have been impressed by the fact that they are by no means rare. I have found they yielded very promptly to hexamethylinamin. As the Doctor says, a fever of obscure origin, especially in girl babies during the first few years of life, is often explained by a pyelitis or pyelocystitis. Sometimes the patient does not show characteristic symptoms, such

as would readily call attention to the urinary trouble.

Dr. M. L. Moore: I have been most interested in this subject because, like the rest of you, I have overlooked many of these cases. Last year I saw a case in a girl baby two years old, in which the first indication of trouble was an irritable bladder. The mother called attention to the fact that the child was voiding urine very frequently. I prescribed over the telephone. Later the mother told me the child had a high temperature, and upon examination I found a temperature of 105°. A specimen of urine was taken through a catheter and found to contain pus. Dr. Black reported that it contained the colon bacillus. The child was tender over the right side but not over the left. We put the little patient on urotropin. There was no evidence of the elimination of the urotropin in the form of formaldehyde. I had heard that by giving the acid phosphate of sodium with the urotropin in these cases, we would get the effects of the formaldehyde. This we did in this case. The child improved but had a succession of relapses. Dr. Black then made a vaccine, which was used with the prompt cure of the case. There was one relapse, after which the child has remained perfectly well. I have no doubt I have missed many of these cases, because too often we are in a hurry and do not strip these little patients and examine them thoroughly. In adults I have seen a number of cases, and although our literature does not give us the glowing results of vaccines, yet in all cases in adults I have seen, there have been only good results from the use of vaccines.

I have seen probably a dozen cases in the past year and a half. So this paper to me is a most valuable contribution. It brings out complications of other conditions which we are liable to treat for something else unless we study all these cases thoroughly.

Dr. P. V. K. Johnson. Closing remarks: I agree with Dr. Yost, that there are many more of these cases than we realize. Many of them are not recognized. Just lately I have seen three cases besides those I reported this evening.

HEBOSTEOTOMY.*

Dr. Frank C. Ainley.

Dr. M. L. Moore: There is no doubt but this operation has a fixed and permanent place in obstetric surgery. I have never done the operation. I have had cases in which probably it might have been the operation of choice. But in such cases I have always done the Caesarean Section, of which I have had sixteen cases. Among those cases are cases of operation for tumors and after ventral fixation. In Pubiotomy, I could imagine the possibility of injury of the joints, especially by a man not skilled or who is careless and does not watch the separation of the bones. The authorities I have read have claimed that in a separation of some two inches we have an enlargement of the diameter of perhaps a half inch. In a borderline case which has not been infected—and they should not be infected, as was stated in the paper—this operation might have an advantage over Caesarean Section. It possibly might offer less exposure of surfaces for infection. However, Caesarean Section in a well-appointed operating room with trained assistants is attended with practically no mortality. The danger is not greater than in ovarian work. The operation is done quickly, and in the cases I have had there was no more loss of blood than in the delivery of the placenta in the third stage of normal labor. There should be practically no mortality. In full-term cases, practically all the children live. They have all lived in my cases, which have been cases of election. Statistics extending

over a large number of cases, however, do not give quite such good results.

In patients examined at home before Caesarean Section, there is danger of the operation being followed by sepsis, just as in the operation of Pubiotomy. However, in Pubiotomy you do not open the peritoneal cavity. It could be done, it seems to me, quite as easily with proper instruments and assistants. There are certain dangers of injuries to the bladder and injuries in the extraction of the child, and it requires considerable judgment and fine judgment to determine when to do the operation of pubiotomy in preference to Caesarean Section. The authorities state that in borderline cases, the patient should be examined as infrequently as possible, always under the strictest asepsis, to permit the case to reach the second stage, hoping that the child's head may mould and find its way down into the pelvis, so that the case becomes a forceps operation. If the head does not enter the pelvis after perhaps two hours, it is then a case for the choice between the two operations, Pubiotomy and Caesarean Section. In such cases Dr. Ainley prefers Pubiotomy. On the other hand, there I have always done the Caesarean Section and I have not had cause to regret it. However, probably I may do pubiotomy in such a case, should it present, although I have not as yet done it. I cannot offer anything but commendation of the Doctor's paper. The relatively contracted cases are truly borderline cases. In absolute cases it is different. In a generally contracted pelvis of something like nine centimeters, I believe we have an absolute indication for Caesarean Section. In some of the borderline cases possibly we should do Pubiotomy. I do not believe we should interrupt borderline cases in the earlier months of pregnancy because of the large mortality of the children in such cases. These operations are done in the interests of the child. They are

*Published in this issue of the Southern California Practitioner.

not done for dead children; then we would do a Craniotomy. When a child is living, premature labor brings into the world an infant with lowered vitality, and a large percentage of such children die during the first year. I have brought on premature labor a good many times and a good proportion of the children have lived, but I can recall a number of cases where the babies did not live more than two or three or possibly six months. So in the cases in which we are in doubt, I think it is better to let the case go on to labor. With good pains we may get dilatation through the membranes breaking or by retraction, and then with the patient clean and not infected by examination, we are in position to do a major obstetric operation with little mortality to the mother and the chance of giving the mother a good strong healthy baby with every chance to live. So I believe the conclusions the Doctor has come to are the best guides for us. I certainly concur in every statement he has made, and I believe in some borderline cases in the future I will do Pubiotomy.

Dr. W. O. Henry: I have done the Caesarean Section in these cases. I may have done wrong in not doing Pubiotomy in some cases. We should be conservative. As Dr. Moore has said, we should let the patient go to term, for then we will save more babies for long life than otherwise.

Dr. T. P. Gerson: I would like to ask Dr. Ainley, in view of his successes with this operation, does he think symphysiotomy is ever justifiable in any condition.

Dr. E. M. Lazard: I have not had any experience with either pubiotomy or symphysiotomy. In listening to the Doctor's description and reading of the operation, it seems to me this operation has an extremely limited field. I believe our methods of diagnosis in these cases, especially our methods of mensuration of the pelvis, are not so accu-

rate as to enable us to make a positive diagnosis of the diameters of the pelvis within a centimeter or a fraction of a centimeter. Then so much depends upon the size of the passenger, the baby. That is a factor that cannot be overlooked. We cannot be so sure of the size of the baby. We may think we have a large baby, but find afterwards that it is a very small baby. When perhaps eighty per cent of the borderline cases are delivered spontaneously, I would be inclined to give them a chance under strict asepsis. With more experience with pubiotomy, I might change my opinion, but I am much in favor of the classical Caesarean Section. That operation does no damage to the child, it does not subject the patient to the trauma of labor, and the mortality of the mother is practically nil in good surroundings. In one case the Doctor reported, a deep tear was mentioned that communicated with the wound of operation. If strict asepsis had not been observed, there would have been trouble in all probability in that case. I don't think any of the advanced authorities today practice symphysiotomy.

Dr. Lyle G. McNeile: Probably Williams has done more to popularize this operation in America than any other clinician. In Chicago, DeLee detests the operation, and Bacon thinks as Williams, that it has its proper place. I was not particularly impressed by the good results following pubiotomy. In Johns Hopkins they have had wonderful results, but I do not believe such results can be obtained save in a clinic that practically specializes in the operation. The Doctor has mentioned fibrous and bony union, but I have seen a case in Chicago in which there was no union whatever. It was repaired some eighteen months later. There is an operation I think should be mentioned, that was advocated by Barton Hearst and reported in the June number of the Bulletin of the Lying-in Hospital. His operation is a modification

of the old extraperitoneal Caesarean Section, with which he has obtained very excellent results. Indeed, I believe they are better than the results with pubiotomy, taking all operators into consideration. In the cases of generally contracted pelvis, our old text-books tell us never to operate but do a classical Caesarean Section after a certain number of hours. I believe we should take into consideration whether the membranes are ruptured and the condition of the patient. If the patient has been under the observation of a competent man, had proper obstetric preparation and very few and only clean vaginal examinations, it is safe to do a classical Caesarean Section. I have done three or four under those conditions the past year with excellent results.

Dr. Francis O. Yost: It seems to me this operation competes as much with the old high forceps operation as anything. We all have seen those cases in which we didn't think there was much disproportion before labor, but after the case is well under way the child will not come down into the pelvis and we need the axis traction forceps for delivery. The mortality of the child then is perhaps thirty per cent or more. It seems to me those are the cases in which pubiotomy will lower the fetal mortality. As a matter of election beforehand, I think most of us would choose the classical Caesarean Section. There is a very pretty series of pictures of pubiotomy in Kelly's stereo-clinic, in which he shows the application of the forceps first with tentative traction and then after failure to deliver the child in that way they did a pubiotomy. They show there the springing apart of the pelvis and the easy delivery with forceps afterwards. It seems to me Hebosteotomy certainly is going to be one of our valuable resources, and it certainly has completely and absolutely displaced symphysiotomy.

Dr. Lulu Peters: Like Dr. McNeile, I

had the opportunity to study under DeLee and Bacon during my internship in the Lying-in Hospital of Chicago.

I was called to a para VIII who had never had any difficulty in childbirth, although she had a slightly contracted pelvis. This time, however, the fetus seemed extremely large and after several hours of very severe second stage pains I called Dr. Bacon. She was taken to the hospital, high forceps tried without success, then Hebosteotomy was performed. The babe, an eleven-pound girl, could not be resuscitated, but the mother made a successful recovery.

Dr. Lazard's statement that it is difficult to get the accurate true conjugate was illustrated for Dr. Bacon and Dr. Rhorlock differed by over a centimeter on the patient's measurement, even though taken while she was under anesthesia.

Dr. Titian J. Coffey: I should like to ask Dr. Ainley as to the condition of the cervix at the time you do this operation. What do you do when you have a generally contracted pelvis and contemplate this operation where there is an edematous condition of the cervix and the head just beginning to pass into the brim?

Dr. E. M. Lazard: In most of these cases reported a high application of the forceps was made. It seems to me a distinction should be made between the cases in which the head is engaged in the brim and those in which we have a floating head. In cases with floating head would a version be done or a high application of the forceps attempted, after pubiotomy had been done. When there is no attempt of the head to enter the pelvis, pubiotomy would be more difficult than Caesarean Section.

Dr. Frank C. Ainley, in closing: I have had no experience with symphysiotomy. My opinion would be based on the experience of other men and the statements that other men, such as

Gigli, for instance, made. It seems to me Hebostectomy has a distinct advantage over Symphysiotomy. The operation, of course, is not done for a lack of dilatation of the cervix, but for a contracted pelvis. The use of the forceps may be divided into the low application, mid-application, high application, and the application to the unfixed or floating head. The high application is the use of the forceps when the head is fixed at the inlet of the pelvis. Some English obstetricians advocate the tentative application of the forceps. When the head does not readily enter the pelvis they think pubiotomy should be considered. The difference between applying forceps before and after pubiotomy, when we have a floating head, is very marked. The head settles down markedly after severing of the bone. The use of the forceps then is easier than when the bone is not severed. It may be in some cases that version would be the operation of choice instead of forceps.

A YOUNG FETUS.

A Specimen Presented by

Dr. A. J. Scott, Jr.

Mrs. D. J., age 21, had one child about one year old. The latter part of May, 1914, she contracted a cold and developed a severe bronchial pneumonia. She was under the care of Dr. W. L. Huggins, but as he was going on his vacation I was asked to look after

the case. I saw the patient first the 29th of May and then again the 7th of June, when she called me out hastily, saying that after a violent attack of coughing she started to bleed and had passed a suspicious looking specimen, which is shown herewith.

Her menstrual history is about as follows: After the birth of the child she menstruated regularly up to the time of the present illness, when she missed the period which was due the latter part of May. Her dates are a little obscure, consequently we can only call these general statements, but the specimen was about one inch in diameter when it was fresh and had all of the tiny villi surrounding it. It appears to be a perfect specimen of a fetus of about 14 to 21 days.

PREGNANCY AND FIBROID.

A Case Report by Dr. Titian Coffey.

The report of Dr. Lazard's case recalls one I saw in consultation during the summer.

The woman was 41 years of age, this her second pregnancy, the previous one having been seventeen years ago. She was under the care of an osteopathic physician, and was referred to me for an examination by one of our leading surgeons, as he had been called to do a Caesarean Section for a tumor complication the pregnancy.

Upon examination I found a full-term pregnancy with a large fibroid

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filling the right iliac fossa and extending well up into the flank. Internal examination showed lightening to have occurred with the occiput well sunk in the pelvic cavity.

I advised against operation, for the tumor was entirely out of the dilating zone, and I anticipated she would have an easy, normal delivery.

I did not see the case again for about a week or ten days after the confinement, and the rest of the history is from hearsay. The membranes ruptured spontaneously some three days before she went into labor. She delivered herself spontaneously, but, following the confinement, I am told, she had some sort of seizure, which was called by her attendants eclamptic. There was no evidence of toxemia from the urinary analyses, nor was there any history of a puerperal eclamptic condition.

So I am inclined to believe the condition was purely hysterical and

wrongly diagnosed. However, there was a retention of the placenta with manual removal. Forty-eight hours after the confinement the patient developed spesis, and when I again saw her she was in a grave condition. General peritonitis was marked, temperature high, pulse rapid, odor in the room frightful.

External examination showed the large round mass extending as high as the navel and giving the appearance of a woman of about six months' pregnancy. If I remember correctly, it was about a month after the confinement that the patient was taken one night with severe uterine contractions, and, after being in what might be called spurious labor for a certain number of hours, passed a large putrified mass, which was evidently the fibroid which had sloughed and been expelled. I did not see the specimen nor the patient, and I believe she died two weeks later.

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NURSES AND LABOR LAWS.

There is perhaps no one question which is fraught with such tremendous import to the cause of nursing as the attempt to place hospitals and nurses under union labor laws.

If a case is brought in, after the operating room nurses had been on duty eight hours, you would have to call the walking delegate of the local labor union to secure from him assurance that the emergency was sufficient to justify nurses being recalled to assist at the operation, and that you would not be prosecuted if you called them to assist in the emergency.

What would it mean to have to relieve a nurse during the crisis at childbirth because her eight hours were up, and you would be prosecuted if you allowed her to stay till the birth was accomplished?

What would it mean to the spirit of your training school if you felt positive that among the probationers you had admitted there were spies, who were there because of their sympathy with the labor unions, and who would report to the walking delegates that you had kept a nurse who had dillydallied with her work till she had finished it?

Yet all this is happening where labor unions have succeeded in bringing nurses and hospitals under their domination. The trouble with hospital people is that they hear of such legislation but think it absurd, and imagine it could not possibly come to pass in their State. It is probable that other States besides California will wait till the precious law is on the statute books before they will wake up enough to organize so as to be ready to fight such measures effectively.

Miss Anne A. Williamson, superintendent of the California Hospital, Los Angeles, presented this subject in a most masterly manner before the sixteenth annual conference of the American Hospital Association at St. Paul,

and we are happy to be able to give her paper to our readers in this issue. Editorial: The Trained Nurse and Hospital Review, (N. J.) November, 1914.

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For the benefit of physicians who are uninformed on the subject, it may be

said that Pituitrin is an extract of the posterior or infundibular portion of the pituitary gland. While in use for a number of years—chiefly, perhaps, as a hemostatic and heart stimulant—it is only of late, comparatively speaking, that its value in uterine inertia has been fully understood. We understand that copies of the Pituitrin pamphlet are still available and may be obtained upon application to Parke, Davis & Co., at their general offices in Detroit, Michigan.

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BREAST FEEDING—INDICATIONS AND CONTRA-INDICATIONS.*

BY DR. HARRY M. BRANDEL, LOS ANGELES.

There is a popular tradition that there is little to learn about breast feeding, that there is, in fact, some sort of physiological relationship between the secretory functions of the breast and the nutritional requirements of the infant, which reduces our responsibility and the mother's responsibility to that of putting the infant to the breast and leaving it there until it refuses to take any more nourishment.

If a portion of the medical energy which has been spent in recent years on improvements in the artificial method had been bestowed on the study of the problems of breast feeding, I believe that half the children who are now relegated to the bottle would remain at their mother's breasts. It appears to be nobody's business to make a study of breast feeding.

The average obstetric physician thinks it beneath his dignity to study such a commonplace matter as the feeding of the infant, and leaves the details to the nurse. Moreover, both

he and the latter pass on to fresh cases and "new pastures" without having opportunities of studying the after effects of their treatment or neglect, whichever it may be.

On the other hand, the children's specialist has few opportunities of supervising the management of breast feeding until the damage has been inflicted and the infant is some weeks old.

In many cases breast feeding is conducted so badly that sooner or later, artificial feeding is resorted to as the lesser of two evils.

The average physician called to attend some infant with digestive trouble, if he does not immediately straighten things out, turns to his favorite text-book and skips the part devoted to correcting the trouble with mother's milk, and reads up on milk formulae, and the long struggle begins.

Writers on the subject of feeding generally begin their remarks by emphasizing the necessity and importance

*Read before the Los Angeles Obstetrical Society, November 10, 1914.

of breast feeding, but after a few general statements on this point, proceed to the discussion of the various kinds of artificial food, their chemical and physical composition, their drawbacks, their modes of preparation and so forth. We are too ready to say, "This woman cannot nurse her infant; let us seek to discover the best possible substitute on which to feed it," instead of saying, "This woman cannot nurse her infant; let us try to discover why, and remedy **that** defect."

That maternal feeding is of the greatest importance to the baby is generally conceded, yet we have all experienced cases in which we have wondered whether it was safe for the child and for the mother to allow the nursing to be continued. In some cases there are reasons which make it advisable to wean the baby even against the mother's wishes.

Certain contra-indications to nursing need but little mention, such as the presence of cleft palate and hare-lip in the child, which make nursing almost impossible. A premature baby is often too weak to draw on the nipple, and in this case the child should be fed by a medicine dropper with milk drawn from the breast.

With malignant disease in the mother—epilepsy, chorea, insanity and chronic alcoholism, nursing should not be allowed. In pregnancy it is usually necessary to discontinue nursing. This may not be necessary for some time, however. The condition of baby and mother is the only guide. Many writers believe that there is a greater tendency to abortion. Of the conditions which might influence the mother during the puerperium, first in importance stands eclampsia.

During an attack all sources of nerve irritation should be avoided, hence nursing is not permitted; moreover, the milk during an attack is of poor quality. After the attack has passed, many women can nurse without detriment to

themselves and with benefit to the child. We must be sure that the toxins have disappeared and that the breasts have been emptied several times.

Nearly all men agree that a true septicemia is a contra-indication to nursing, but in mild cases it may be permitted. Nursing must be discontinued in mastitis because of the danger to the child from the infected milk acini and the transmission of bacteria, also because the condition is an acute one and accompanied with severe constitutional disturbances. Rest for the breast is most essential. It is usually possible to allow the other breast to be nursed.

In the consideration of constitutional diseases, tuberculosis is of foremost importance. Babies should absolutely be kept apart from their mothers or from any other source of contagion.

They should be fed upon milk from wet nurses or modified milk, and should never nurse from the mother because of the great drain upon the woman and the dangerous association for the child. Bacteremias of tubercle bacilli are extremely rare, but have been recorded. On the other hand lesions of the gland may be present, but not apparent clinically.

Syphilis in the mother is very frequent. Should we permit the mother to nurse her baby, or is it a direct contra-indication?

If it is prenatal, the chances are that the child is already infected. If the mother is under treatment, the child also receives some medication, as mercury is secreted through the breast. If the infection is post-partum, nursing must be discontinued at once. Osler says that there can be absolutely no syphilis in the child without syphilis in the mother.

Mothers suffering from primary or secondary anemias are generally compelled to discontinue nursing, both because of their physical condition and

also because of the poor quality of their milk.

As regards contagious diseases with measles, chicken pox, mumps and mild diphtheria, it may be well to continue nursing. In cases of whooping cough and scarlet fever it is best to discontinue nursing.

According to Fischer, 90% of poor mothers are able to nurse their children, while only 17% of rich mothers are able to perform the same duty.

The question is asked of every mother who presents an artificially reared babe or one on whom artificial rearing is being attempted, "Why did you take your baby from the breast?"

Common answers are: "I did not nurse my baby because I could not." "My milk poisoned my last baby and it died." It probably could be stated that it was not the mother's milk that poisoned the baby, but in all probability the indifferent artificial feeding on which it was placed when the breast was unnecessarily withdrawn.

"I can never nurse my babies because my milk dries up," "I am too nervous or too irritable." "I am too weak." "All my strength goes into the milk."

These and similar replies are given to our queries as to why the breast feeding was discontinued, and not one of them will stand the test of careful scrutiny.

We are still in the dark as to what promotes or hinders the possibility of lactation, but it is generally acknowledged that it is artificiality and civilization rather than poverty or starvation that render the numbers of nursing mothers so low.

Without making any dogmatic assertion that all this modern increase of weaning is unnecessary, I hope to be able to raise in your minds the doubt whether a considerable amount of this leakage from natural to artificial feeding is not avoidable and due to mismanagement at birth.

Among the better element a pretense of willingness to nurse is often made while at the same time every possible excuse is seized on by the mother in an effort to demonstrate her inability.

The joys of social life, an abnormal love of pleasure, the confession of ignorance, a desire to escape the obligation of maternity underlie the plea for assistance.

Very few women of the poorer class make any effort during pregnancy to prepare their breasts for nursing, and the method employed is inadequate, consisting simply of rubbing the nipple with some form of alcohol and pulling it slightly with the fingers. The result of this treatment is frequently to cause the cracks and abrasions the women are trying to avoid.

The constant use of alcohol alone renders the skin much too dry. To prevent this, some boracic ointment should be used while the drawing out of the nipple is performed. Nipples can be best prepared by suction rather than by pulling. This suction can be best obtained by a clean clay pipe used with the bowl over the nipple and the stem in the woman's mouth.

It is not true that modern women, just because they are modern women, suffer from any degeneration of the mammary gland. There is no proof that racial development is in the direction of atrophy of the gland or of degeneration of its functions.

We should remember that the force which brings the mammary gland to free secretion is provided by the vigorous sucking of the child.

When the infant is born, there is but little milk in the breast, while in a few days after, a strong healthy infant has begun to suck, milk flows in abundance.

If two infants are nursed, the amount of milk doubles itself; if one is taken away, the same amount is reduced by half. If, for any reason, only one breast is used, that breast alone

secretes milk while the other remains dry.

These observations show that the main factors which determine the initial secretion of milk in the mother's breast reside in the child and not in the mother.

The child must be put to the breast regularly and every attempt must be made to induce him to empty it, remembering that it is only when the breast is sucked dry that the amount of milk secreted begins to increase, and that with incomplete emptying the daily total declines. To achieve the best results a three-hourly interval is not too long, each breast being used alternately.

When the infant refuses to suck more, the breast pump should be used and the breast completely emptied. Some people have laughed at the careful arrangement of hours for feeding, saying that it is an artificial interference with the natural desires of the infant; but the secretion of the breast certainly tends to be periodic. During the first few months the milk comes into the breast at regular intervals, and if the baby is not there to suck, the milk runs away.

It is a common thing to hear mothers say that the milk goes when they come downstairs, and the cause of this is partially a deficiency of regular periodic stimulation during the lying-in period.

With regard to the refusal of the child to take the breast and the advice of the nurse and friends, I should like to point out that all nursing, particularly in primiparae is difficult at the beginning. The recumbent position of the mother, her inexperience and possible awkwardness, the small and undeveloped condition of the nipples, all tend to put difficulties in the way of the reluctant and worried infant.

Much more serious are the toxic products which appear in the milk as

the result of mental excitement and worry.

Vincent quotes the case of a cow whose fats dropped from 3.6% to $\frac{1}{8}$ % in the show yard. It should be noted that it is worry and not work that causes these bad results.

Holt says: "It is the nervous condition of the mother more than anything else which determines her success or failure as a nurse," and I am sure that all who have had experience of cases with this kind must agree with him.

Breast feeding is usually discontinued through a fear either of not being able successfully to accomplish the act of nursing through not knowing how to go about it or through a fear that the milk is sufficient neither in quantity nor in quality to supply the demands of the infant.

The inhibition of secretion finds its likeness in an identical effect on other secretions as that of saliva when fear is in evidence.

All infants who are not progressing satisfactorily on the breast, and, possibly even those who are apparently thriving, should be given a "test-feed" as a routine practice for it is absolutely impossible to manage breast-feeding in a rational and scientific manner without doing so. The infant is carefully weighed on accurate scales before it is put to the breast, and then again after the meal is completed. The difference in the two weighings represents the weight of the food consumed.

Aside from the "test feed" a fairly accurate estimate of the amount of flow may be made by using the pump to the opposite breast while the baby is sucking; the amount obtained is rather less than that which the baby gets.

Nurses frequently use the pump in an entirely wrong manner by applying it to the breast while the baby is not sucking nor due to suck. The mother, of course, is much impressed when she

sees the flow into the pump is so small, and needs very little persuading that her milk is of little use to the baby.

Infants do not obtain progressively large quantities of milk as they grow older, but the quantity consumed remains practically constant throughout the first nine months of life, or if the infants are fed at longer intervals as they grow older, the total amount consumed may be, in some instances even less than it was during the early months of life.

A difficulty arises when the mother requires laxative medicine and the infant does not; the only purgative I know of that does not affect the milk is castor oil.

A great deal may be done to stimulate the mother's peristalsis by substances containing some indigestible residue and petroleum emulsion in some form.

An excessive supply of milk is the most frequent cause of trouble in the colicky infant. The healthy baby usually suffers. Being strong, he nurses rapidly and perhaps empties the breast, at the same time distending the stomach and forcing some milk into the duodenum before it has undergone any gastric digestion. The over-distention of the stomach and the absolutely undigested milk in the bowel, cause colic.

With regard to quantity, some women seem to have suitable milk; only that in the case of a big hungry child, or with twins, there is not enough of it. These cases are undoubtedly helped by the ingestion of large quantities of fluid. Soup, gruel and even plain water should be taken in large quantities. Most women as a rule take too little fluid. The urine is, of course, thereby increased, but that does not alter the fact that the milk is increased also. Violent exercise, causing much perspiration, should be avoided as well as nervous fatigue. Gentle and careful massage of the breasts is of use, and in this case the child should

be given both breasts at each nursing in order to stimulate them.

Alcohol undoubtedly increases the quantity of milk, but is inadvisable for many reasons. The chief one that concerns us is that it frequently upsets the child's digestion.

Malt increases the quantity of milk as well as the fat present. If ordinary malt extract is disliked, malt can be given in a variety of other ways, such as malted cocoa, malted milk or Mellins food. There is a preparation called "Lactagol" which the manufacturers state is a preparation of cotton seed, its galactogenic properties being due to a substance named "Edestin."

Beckman used "Lactagol" as the substance with which to conduct his milk experiments, and got favorable results both in cows and women. With the former he got a rise in the fats of from 3 to 3.9%. In the proteins of from 3.2 to 3.7% and in total amount of milk a rise of from 13 to 17 litres per day.

In human milk there is almost always a rise of at least 2 or 3 points in both fats and proteids as well as an increase in total quantity.

The element in milk which most frequently falls below the standard is fat. It can be increased by a good nourishing dietary, particularly one that is rich in protein, by the administration of malt extract and by the use of "lactagol."

Also if the supply of milk is abundant, but the fat low, the child can be fed the latter part of the milk from each breast, the "fore milk" which is high in proteins and low in fat being drawn off with a breast pump.

The proteins generally give trouble by being too high rather than too low. They are generally supposed to be increased by over-feeding and lack of exercise, and can be diminished by regulating the diet and getting the mother to take long walks, to scrub her floors,

or take some other form of active exercise.

Undue amount of protein is generally recognized by undigested curds in the stools. Cases where the fat is too great in amount are usually recognized by undue looseness of the bowels on the part of the infant. This may be regulated by giving less protein in the mother's diet and by not letting the infant empty the breast, as the last part is particularly rich in fat.

Crookshank, in a recent article in the British Journal, of Diseases of Children, lays stress on what he calls the biological value of food. He says: "The wife of a cottager is better fed biologically on whole-meal bread, even though black; on fresh milk, even if skimmed; on home-made cheese, even though sour, and on oatmeal, even if savoured with salt only; than is her town dwelling sister on frozen mutton, tinned tomatoes, condensed milk and packet tea."

Before advising the institution of artificial feeding we should use every means in our power to aid the estab-

lishment of the breast secretion, and we should only desist from our efforts when it becomes evident that the infant's vitality is becoming seriously involved.

Instead of advocating this one's or that one's method of artificial feeding, let the doctor see to it that he is known as an actual and practical advocate of breast feeding.

Let him refuse to place an infant on the bottle just because it is brought to him for this purpose, unless he is presented with a sound reason.

Let him by actual weighing experiments before and after each feeding, satisfy himself as to whether or not the infant is receiving sufficient food. He should consider the weight of the infant at birth, its present weight and its average gain, before he determines the nourishment to be unfit.

If it be found so, let him make an honest endeavor to re-establish the lacteal flow before confessing failure.

When a baby is weaned the bridges are burned behind.

H. M. BRANDEL.

THREE YEARS' WORK IN THE CHILDREN'S HOSPITAL, A BRIEF RESUME.*

BY DR. CHALMERS FRANCIS, LOS ANGELES.

Since early in 1911 when the Children's Hospital changed the personnel of its medical and surgical staff, I have been in almost complete charge of the infant and medical departments until the new hospital was opened.

The hospital has in these four years advanced from small obscurity to visual prominence through the charity of two ladies who gave the work a plot of ground at Vermont and Sunset Blvd., and also a building with equipment second to none. This has necessitated an increase in the expense to maintain the property, the work of the

charity and the added responsibilities the increased quarters require. For example, moving to a cesspool district cost \$200 a month until a pump was purchased and now adds \$100 a month. The old quarters cost \$800 a month to run, the new \$2500 a month; the income is \$750 a month, made up of annual subscriptions and donations (the annual subscriptions in 1913 were \$875.) The per capita cost with half of the hospital only in use is \$1.42 per day; fully occupied the cost would be \$670 a month more and a reduced per capita cost of \$.95 2-10th a day. Com-

*Read before the Los Angeles Obstetrical Society, November 10, 1914.

pare with the Los Angeles County Hospital, \$1.15 a day; Chicago Memorial County Hospital, \$1.65, and Toronto County Hospital, \$1.89, and you will see the management is, as is the equipment, a credit to the city. Yet POVERTY handicaps the staff for want of all the facilities that up-to-date medicine calls for and the only drawback to working for the charity is lack of funds to do the work to the full advantage. We are pioneers, and we aim not at big reputations but at getting together a complete unit for the future to make a reputation equal to or better than any county hospital in the East or Europe. We have the plant, the location and the need for the charity; all we want now is endowment.

The work we have done in the three years 1911-12-13 when I was in charge at Alpine street is now what I will review; the work of the new hospital must at present be left for future reference.

Of the two departments of the work, I will dismiss the out-patients' department with the statement that we saw 4981 patients.

In patients admitted 1840 discharged, cured, 1260; improved, 244; unimproved, 104.

Deaths in hospital, 159 (percentage 11.5) of these, medical cases 118.

Of medical cases cared for—Respiratory system, 80 (Br.-Br. Pm.-Pl.) Died, 13 (Brpn. 11 Br. 2.)

Infectious, 136—14 Pertussis, 2 Erysip., 38 Diph., 13 Measles, 21 Typhoid; 3 Rh. fever, 2 Tetanus, 1 S. F., 6 Poliomyelitis, 4 cerebro-spinal, men. 32 Pnobar; died: 1 Typhoid, 2 Tetanus, 1 Poliomyelitis, 1 Cr. Sp. Men., 5 pn.

T. B. C. 33—Pulm. general, etc., 3 died; also 21 meningitis, 11 died.

Congenital, 13—Idiocy, 1 died; 2 Spinabif. 1 died; Cretin Lues., 2 died.

Nutrition, 220—Rickets, enteritis, gastr., colitis, premature, Inanit., Marsms, obstruction, Oesoph., pylorus, Anus, died 64.

Genito Urin. 11—Pyoneph, 6; Nephritis, 2 died; 1 Cystitis.

Nervous system 35—1 Little S., 14 Chorea, 1 Post Dip. Pal., 2 septic menin., 1 encephalit., 3 Hysteria, 5 epilepsy, 3 hemiparesis, 2 hydroceph.; died, 3 menin.

Skin—20.

Abdominal—Traumatic, Hepatitis, Appendix; died, 1 App.

Circulatory system 27 — Arterio sclerosis 2, Cardiac 24, Leukemia 1; died, 1 Leuk.

The death list is interesting; average age nutrition cases 6 months; average days in hospital, 8.

Youngest, 2 hours old; oldest, 13 years; shortest time in hospital, 1 hour; longest, 56 days.

The Br. Pn. cases average age, 12.09 months; days in hospital, 8.27.

Lobar Pn. cases average age, 8.6 months; days in hospital, 4.

Oesoph. obst. child 2 years old; in hospital 15 days.

Acute Appendix. 3 months old; in hospital, 1 day.

Cases admitted were from all over Southern California, as far north as Santa Barbara; south, Imperial and San Diego; also Arizona and Nevada. E. g., in 1912, we took in one case from Catalina, 2 from Los Vegas, 3 from Santa Barbara, 1 from San Diego, 2 from Imperial; also 2 from Ventura.

The main work in the Children's Hospital is the care of cases suffering from errors of Ingesta. I have aimed not only at getting the infant over the temporary crisis, but to teach the mother in simple language enough scientific data to work at home on the main idea. I show her that nature gives an ideal food, mother's milk; I tell her it is made of 2 parts meat, 4 parts fat, 6 parts sugar; I impress this 2-4-6 by 6 letters in mother. I point out the best substitute is cow's milk, and boiling kills germs and makes the curd easier to digest. Where milk is a

difficult question re purity, the advantage of boiling is obvious. In U. S. A. only about 2% of the milk supply is "certified." That this work at present is inadequate, either because of the inability of the average milk supplier to realize the standard, or because the standard is too high for the commercial average man to successfully attain and invest in. Here I have united several dairies and I support the Arden and L. A. Creamery special as perfect milks, the former having an advantage in the scientific collection and delivery, but cannot be obtained everywhere in the city. They are too independent. I show the value of cow's milk is milk, meat 4 parts, sugar 4 parts, fat 4 parts, 3 equal values impress by cow has 3 letters. They can remember this and it is near enough the truth that nature can digest a food based on these percentages. I tell them the capacity of the stomach and the weights of a child; I advise feeding a simple rule of one oz. more at a meal than months of age, another rule is to start one oz. a day of cow's milk for every lb. of weight, aiming at getting baby to take gradually a food in strength 2 oz. for every lb. Once on this food no baby can starve, he gets a caloric value sufficient—e.g., a baby needs 45 calories for every lb.; 2 oz. of milk contains 40 calories and the addition of sugar makes up the suppliant amount. I use milk sugar in preference to all others for cheapness' sake. Mothers appreciate simple language, as meat for proteid, sugar for carbohydrate, with big words they realize you are clever, but they despair at their own intelligence.

I tell them about stools, if well digested it matters not what they have eaten. I feed a child that has teeth food that wants biting and later chewing, for nature suggests the teeth are there for work; I prefer soluble proteids as meat serums soaked up by cracker or crust; I prefer bacon fat on crust as easier to digest than cream fat.

I use butter on bread and I like yolk of egg as containing natural mineral iron phosphorous food and because milk and meat juices have albumen insufficiency I do not always start egg feeding with the white in preference to the yolk. Be it here said I never start these foods without training and teaching the parents that they are additions to, not replacements, of the bottle, and I remember the stool is the main guide and no item is used habitually until observation shows a normal stool after experimenting. All feeding is education outside mother's milk. I cannot eat Mexican dishes, and possibly the Americans drink so little tea because it is British, so to do; nevertheless we can educate the most facetious to good things if necessity demands and surroundings prevent the obtaining of what the heart desires.

The other cases interesting us are: Oesophageal Obstruction in a Jap baby 2 years old from swallowing one quarter of a cup of lye, 6 weeks before admission. Dr. Morton did a Gastrotomy but death occurred 9 days later.

The other case, Appendicitis in an infant 3 months old, admitted 4-10-11 as feeding case with history unable to take any food. May 14th taken from hospital against advice; returned May 31st. Died same day. A P. M. showed peritoneal adhesions around spleen and capsule thickened, R. Ing. Hernia contained Caecum and Appendix, tip of which was inflamed and adherent to testicle and pus pocket around. Had double hernia.

I give you this short resume as food for thought. I often wonder if you ever realized the opportunity here for great and good work. Is your interest active or passive? The historian of the future will commend or condemn the attitude of the profession not on the activity of a few, but on the attitude of the whole. Is there in Southern California an indifference to Charity, or a carelessness bordering on a sin? Here

in our midst is a great work. Why are the facts of the work so little known; have you ever told a wealthy patient about it, do you let the people know of it? I think we have all been a little neglectful; perhaps I puffed up with the pride of what I have done, have not effaced myself enough; perhaps some of my confreres let their interests run into other channels. Anyway, it is a true fact we, as a profession, must face, that here is a need running towards dangerous rocks, and as a body we have done little to steer the ship to a safe harbor. A hospital in Southern California doing a great charity is spending \$2500 a month, and its income is not more than \$750 a month. Let me ask a society which claims pediatrics as one of its main assets to get busy, bury any past ambitions or memories, and exert its influence with the profession and the public to come in and help.

I append to this a statement of the expenses for the month of September, 1914. You will note there are no luxuries; there are no doctors making money out of it; there is no stock drawing dividends. ALL the expense is BARE NECESSITIES.

September Expense Account.

Meat	\$ 161.90
Fish	14.50
Butter	47.94
Flour-bread	32.30
Milk	132.58
Water	58.44
Ice	6.60
Vegetables	61.56
Other groceries	120.00

\$ 635.82

Telephone	25.85
Drugs	150.78
Soaps, etc.	24.22
Fuel	68.91
Gas lights	71.81
Bedding, etc.	162.70
Uniforms	42.00

Brass plates	6.00
Electric iron	6.56
Repairs	6.45
Salaries	1109.58

Total\$2311.05

September average number of patients, 54; Sept. average number of employees, 40; daily average cost per patient, \$1.42; cost of food supplies for September, \$635.82; average number of people fed in Sept., 94; food cost per day, per capita, child, .21 5-6 cents; food cost per month, per capita, \$6.55.

Capacity of hospital, 110 beds, and therefore figuring on the basis of an average of 104 patients with 10 extra nurses and 4 extra employees—

Salaries, \$150.00 extra.

Patients 104, employees 54, total number 158.

Food cost for 158 at \$6.55 per month\$1034.96

Gas, light, fuel, drugs, etc., in relatively increased amounts,

+added salaries1945.38

Total expenses per month...\$2980.34

Average number of patients 104, average number of employees 54; daily average cost per patient, .95 2-10 cents.

Average daily cost per patient at Los Angeles County Hospital, \$1.15.

Average daily cost per patient Children's Memorial, Chicago, \$1.65 per day..

Average daily cost per patient County Hospital, Toronto, \$1.89 per day.

So L. A. fully financed and fully occupied would be less by about 20 cents the county and half that of Toronto.

The fact that in the city of Los Angeles there was only one death from typhoid fever during the month of September, 1914, and two deaths during October is proof positive that our water supply is excellent.

OBESITY TREATMENT, BY MODERN IMPROVEMENTS IN ELECTRO-THERAPY.*

BY DR. CHAS. B. GRAF, MEDICAL DIRECTOR OF THE ELECTRO-MEDICAL INSTITUTE, 131 WEST 39TH STREET, CORNER BROADWAY, NEW YORK.

The keen interest which the profession has taken in a previous paper of mine entitled "Electricity in Gynecology" has given me the impetus to write on a new topic of Electro-therapy. It happened while preparing this paper that I noticed an article of the State Chemical Department of Washington, D. C., dealing with advertised anti-fat nostrums, all of them said to be fraudulent, and most of them noxious to the danger point on account of their depressing drug action upon the heart of sufferers from vitium cordis. The coincidence of this campaign and of a number of editorials in the *Evening Sun* and *World*, which directed one against the fat-reducing quacks, together with my studies of the subject, urged me to give the widest professional publicity attainable to certain astonishing results recently achieved in the reduction of superfluous fat by the use of improved electro-therapeutic apparatus. This topic, which my own clinical experience and the aforetold governmental and press activities have suggested to me, cannot by any possibility be void of interest to any physician. The fat person—the man or woman—carrying 160 to 400 pounds, who comes into the consultation room, and begs to help them get rid of their superfluous adipose tissue, is an every-day occurrence. As long as the physician, for lack of better and more efficacious remedies, had to stick to his pharmacopea and to the dietary regime, in combination perhaps with active physical exercises, he was really in a quandary. The contents of the pharmacopea are clearly not always applicable to cases requiring constitutional treatment. Rigorous dieting is most of the time dangerous, besides de-

pending often upon the individual strong will of the patient, if the treatment should be of any use.

Is there then any definite prospect of success in the treatment of obesity?

Until quite recently this question was practically unanswerable, but today it is solved by one of the safest and surest methods, viz., by the abundantly attested and verified triumphs of modern electro-therapeutics.

Permit me to call your attention to a comparatively trivial incident in the early history of electro-therapeutics, which retarded for a moment the onward march of an important new contrivance. When Dr. Bergonié of Paris first suggested an entirely new method of treating obesity by causing the muscles of the whole body to be compelled by electricity to perform active muscular work, he used for this purpose the ordinary faradic current. His apparatus, however, was not perfect, and for this reason currents of limited energy only, could be applied, with the result that the effect was relatively slight. An important invention, accomplished in principle only, was waiting for the last touch of a master hand to make it practicable. Dr. Bergonié's error in detail was Dr. Nagelschmidt's opportunity.

Dr. Nagelschmidt of Berlin took up the study of the Bergonié method, and succeeded in perfecting an apparatus which eliminated all of the defective features of the Bergonié instrument. With the perfection of the Bergonié-Nagelschmidt apparatus begins a new and most promising phase in the history of mechano-therapeutics, which, despite its beginnings of yesterday, has already an unparalleled record regard-

*Read before the E. M. Society of the City and County of New York, Sept., 1914.

ing the cure of obesity, without pain, without dietetic restrictions, without unpleasant after-effects, but—most important of all—of lasting results.

The Apparatus.

“The fat-reducing chair, built in several models having different adjusting positions, is fitted with very large contact surfaces which are insulated from each other. The large size of these contact surfaces permits the use of high intensities, since the current density per square inch is relatively small. The electrode surfaces are covered with suitable pieces of fabric moistened with warm saline solution. A switch-board distributes the peculiar current produced by the motor-interrupter located at its side, to the several electrodes, by means of various rheostats, and the metronome, whose action can be regulated, opens and closes the general circuit of all electrodes at the desired rate of speed, by means of quick-silver contacts. The electrodes arranged symmetrically in pairs (right and left) can be connected in various ways, so that the current may be sent through the body in any direction desired. For instance, the current may enter at the left half of the body and leave at the right half, or the back electrodes may be connected with one pole and all the other electrodes with the other pole. One or more electrodes may be cut out entirely from the circuit, or the current may be reduced at some electrodes, so that the corresponding muscles will not be stimulated at all, or only slightly, and if desired, a single pair of electrodes may be brought into action, for instance, the abdominal electrodes. Clinical experience will enable the practitioner to adjust the apparatus for each individual patient so as to obtain the current direction and intensity which will yield the best results for the particular muscle groups; thus the proper treat-

ment can be determined for the most varied conditions. . . .”

After placing the patient on the fat-reducing chair, the current is passed through in the desired direction. We now see how all the muscles of the body, so far as they are included in the circuit, are contracted rhythmically with great energy.

“ . . . At each contraction, the lower trunk muscles may raise weights of from 40 to 50 pounds, a distance of several centimeters, in addition to their own weight.

“ . . . All the muscles of the body appear to be engaged in strenuous work, and the patient would not be able for a minute to accomplish by voluntary exertions the work which he is now performing without fatigue. . . .” Care should, however, be taken always to adjust the metronome properly, so that the stimulation period will be followed by a corresponding period of rest during which the muscle may recover. If the apparatus is properly adjusted, there will be, after the session . . .

“not only no fatigue, but the patients themselves will even observe an increased desire for physical exercise.” As regards the length of the individual sessions and their frequency . . .

“the patients should not be subjected at the very beginning to a full hour's treatment with maximum energy, but during the first few sessions the available muscular energy should be estimated carefully, and beginning with fifteen minute sessions, the normal session length (60 minutes) should be attained gradually. In some cases, it is necessary to have two sessions of one hour each on the same day. . . .”

Dr. Nagelschmidt usually administers the treatment in two series, that is, a first series of 25 sessions covering a period of four weeks, then an intermission of from one to four weeks, and then a second series of the same length. If necessary, the treatment should be repeated.

What the Treatment Has Accomplished.

Combustion of fat through the personal efforts of the patient in active exercise is impracticable in the majority of cases. To bring about this desirable end would require an amount of physical labor which the cardiac condition of scarcely one patient out of ten would permit him to undergo, to say nothing of the moral prerequisites that are necessary for the steady shouldering of such a task. It is right here where the Nagelschmidt-Bergonié method of reducing adipose tissue steps in by making the patient perform, in an effortless way, an amount of muscular labor which would be altogether out of his reach if actively attempted. With the majority of the muscles of the body contracting 60 times per minute, or 3600 times per session, it stands to reason, that a great amount of muscular work is being done which necessarily results in a correspondingly increased metabolism. As a matter of fact, the published results everywhere show quite a remarkable reduction. Thus "the female patient before you" says Dr. Nagelschmidt in his lecture before the Berlin Medical Society, "without changing her diet, has in the last six sessions had her weight reduced from 206 pounds and 4 ounces to 202 pounds and 2 ounces, or an average reduction of about 12 ounces per session. This reduction cannot be attributed to losses by perspiration, since she does not perspire perceptibly. Besides, she drinks about 3 pints of liquids daily."

Further, Dr. Veith of Nuremberg says: "I have ascertained, as the result of a single session, an average loss of weight amounting to from 6 to 13 ounces, although at some sessions a reduction of over two pounds was obtained, and I can show reduction of weight up to 31 pounds in six weeks."

It should be carefully born in mind that the loss of weight ascertained at the end of a curative session is smaller than the amount of fat removed, since

new muscular tissue has also been formed. This transformation of the patient's physique from flabbiness to athletic sinuosity is shown by the fact, that the loss in girth will be greater than the loss in weight, making the garments hang loose. As an instance among scores, I cite a typical case of my own clinical experience, where a police officer weighing 383 pounds, and measuring 68 inches in circumference, had until today 14 treatments and shows reduction of 6 pounds and 7½ inches less in girth. The man is still under daily treatment, wishing to reach the mark of 250 pounds. I cannot too urgently dwell upon the fact that this fat-reducing treatment does not depend upon the dubious performance of the patient's individual resolutions, but works with automatic certainty, requiring but little personal effort and practically no sacrifice on the part of the patient. The most important fact, however, in this connection is that the reduction of weight is practically permanent, even after the treatment is discontinued. The reason back of this astonishing phenomenon is this:

1st, the muscular habits established by the action produced by the use of this treatment has the beneficial effect of making the muscles and vital organs of the body respond to more strenuous exercise without depressing the action of the heart or any other organic functions. Thus diet is relegated to second place in the rank of factors determining weight. For the sake of experiment, I had one of my patients eat more than he was accustomed to after the treatment, yet three weeks later no increase in weight had taken place.

In summing up, I urge a close study of this new marvel of metabolic transformation of adipose tissue into muscle, more superinduced by the beneficent potency of expertly applied electricity, which, as I have tried to show above, is of great value and interest not alone from the theoretical but also from the practical standpoint.



HE WON'T LAST LONG AFTER THE SUN GETS UP

SOUTHERN CALIFORNIA PRACTITIONER

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

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EDITORIAL

CONTROL OF PROSTITUTION.

Dr. G. Shearman Peterkin of Seattle concludes a recent paper on Police Control of Prostitution as follows:

In other words, teach the prostitute:

(1) Why, according to the laws of nature, venereal diseases are dangerous to her, to her health, and to society.

(2) The clinical symptoms of venereal diseases, and the means of controlling them.

(3) The means of preventing venereal diseases, and of controlling infection when it is present in herself or she sees it present in her patrons.

(4) The worthlessness of a macroscopic examination and the value of a microscopic examination to herself—why no physician can state truthfully that disease is gonorrheal by simply looking at the sexual organs or discharge, but must examine the discharge with a microscope.

(5) The use of the speculum and tampon to the inmates of assignation houses, that tampons may be used and

frequently changed, and thus infection prevented, especially when intercourse is indulged in during existence of a chronic infection or when menstrual period is present.

(6) That men should use glass urinals in the bedrooms instead of the usual vessels—thus the presence of shreds, etc., in the urine will indicate to the woman the possible presence of gonorrhea, the necessity of taking extra precautions, etc.

Such hygienic instructions will illustrate the character of the means that are within the power of the law to prescribe and the police to enforce, because they aim to mitigate and prevent an evil without transgressing the rights of the individual as recognized by law. They see disease as it is, not as we would like to have it. But especially they do not attempt to abrogate the principles of an eternal law, the law of sex, whose mandates man must accept.

NO NEED TO FEAR MEAT.

According to the specialists of the Department of Agriculture people even in States quarantined for the foot-and-mouth disease need have no fear of eating meat, provided they cook it thoroughly. The foot-and-mouth disease is not easily communicated to human beings through food, although milk from a diseased cow might transmit the disease to a human being. In the case of milk, however, pasteurization will render it entirely safe. Human beings who do get the disease commonly get it from direct contact with a sick animal. It is wisest, therefore, for people to keep away from all animals having the disease, unless they are properly provided with rubber gloves, coats and boots, and these are thoroughly disinfected after each visit to the animals.

In the case of meat, as in the case of milk, it must be remembered that all herds which actually show the disease are quarantined, and neither milk nor meat from the sick animals can be sold. Sixty per cent of the meat used in this country is produced in the nearly 900 Federally inspected slaughtering and packing establishments located in 240 cities. In these establishments no animal is slaughtered until it has passed an ante-mortem inspection and also a most rigid post-mortem inspection by a veterinarian at time of slaughter. After slaughter its meat cannot leave the establishment until it has been carefully examined and stamped "U. S. Inspected and Passed." In all these establishments no animal showing any symptoms whatever of foot-and-mouth disease is allowed to go to slaughter, and no meat which, on post-mortem inspection, shows any suspicious symptoms of this complaint can be shipped out of the establishment. All meat suspected of coming from an animal suffering with this complaint is sent, under Government Seal, to the tanks to be rendered into fertilizer.

The Federal inspection stamp on meat, therefore, means that it is entirely safe.

The Federal Government, however, has no jurisdiction over local slaughter houses which do not ship meat outside of the State in which it is slaughtered. If, however, meat from such an animal did escape from one of these local slaughter houses, which are purely under State or municipal control, all danger of its communicating the disease to human beings would be removed when it is thoroughly cooked and sterilized. Those who are located near an infected region and wish to be absolutely certain of the safety of their meat should cook it thoroughly.

The disease when contracted by adults is not at all a serious illness. It commonly takes the form of slight fever sores in the mouth and a slight eruption on the fingers. In the case of small or sickly children, it may take a more serious form, especially if complicated by other illnesses.

THE SOUTHERN CALIFORNIA MEDICAL SOCIETY.

The Southern California Medical Society held its fifty-first meeting in Los Angeles December 2nd and 3rd. The meeting was characterized by a large attendance, excellent papers, and an abundance of clinical work of a high order. The personnel and work of the Society compare well with that of any district society, and is far better than is commonly found in society or section meetings. The clinical work is especially commendable. The next meeting will be held in San Diego in May, and will probably attract a very large attendance, because of the possibilities of clinical work and the fact that the exposition will be in full operation at that time. The officers of the Society are: Dr. F. W. Thomas of Claremont, President, and Dr. Walter V. Brem, Brockman Building, Los Angeles, Secretary.

TUBERCULIN TREATMENT OF TUBERCULOSIS.

Dr. Walter C. Klats, the resident physician, in the Eleventh Annual Report of the Barlow Sanatorium gives the following very conservative conclusions as to the value of tuberculin:

"Methods of treatment have not undergone any change during the last year. The principles of the general hygienic treatment—diet, rest, fresh air and graduated exercise—have been employed as heretofore, every attempt being made to individualize as much as possible, according to the indications of each case. This applies especially to the regulation of exercise and graduated labor; always the most difficult problem in connection with tuberculosis sanatoria. Patients have shown more interest in and attempted more, in the way of garden work in the care of grounds about their cottages, than they did the year before. As a whole they have performed all their assigned duties cheerfully and willingly, appreciating their real object and purpose. There were only two instances during the year where patients expressed any unwillingness to comply with our instructions in this respect.

"Only six cases took tuberculin for 90 days or more among those discharged during the year. It is always difficult to draw any conclusions as to the effect of the treatment from a study of statistics, even when groups of similar cases that have been treated are compared with similar groups not treated; both living under the same conditions. Before making any positive deductions, it is necessary to study the individual case carefully, weighing all details as to the progress before and after beginning tuberculin treatment. On the basis of such observations three of our cases were apparently benefitted by tuberculin. The other three, though apparently not benefitted at least were not harmed in any way.

"While all authorities agree that different preparations of tuberculin differ only in the degree of their action, we have selected a combination of Bouillion Filtrate and Bacillen Emulsion in most of the cases treated and those now under treatment, our reason being that it contains all of the substances of the culture fluid and the bacillary bodies, unaltered by heat or chemical action."

EDITORIAL NOTES

Dr. James Steinberg has removed his offices to Hotel Howard, 805 East Fifth street, Los Angeles.

Dr. John W. Robertson of Livermore is, with his family, spending a few weeks at the Hotel Darby, Los Angeles.

Dr. Edwin E. Dougherty, formerly of Indianapolis, has located at the corner of Main and Jefferson streets, Los Angeles.

Dr. Nannie C. Dunsmoor and Dr. Robert Morris Dunsmoor have taken offices in the Garland Building, 740 South Broadway, Los Angeles.

Dr. Wm. Duffield of Los Angeles, after spending several weeks with Dr. Howard Kelly in Baltimore, is now at the University of Pennsylvania Hospital, Philadelphia. Dr. Duffield in a note says: "I have come to love Dr. Kelly as a man as I have always admired him as a surgeon."

In the August (1914) report of the Department of Health of the Panama Canal it is stated that "Interesting and satisfactory experimental catches were obtained with a cockroach trap after the type devised by S. A. Graham

of the Minnesota Experiment Station. The trap catches and retains the roaches, and this would seem to be a more satisfactory method of treating these pests than by means of poison, particularly in households where there are young children. The trap is easily

constructed, and banana skins are a satisfactory bait. For general use the double-cone device might be constructed of tin of such size and length that it could be adapted to an ordinary pickle, candy, or other wide-mouth bottle, thus completing the trap."

BOOK REVIEWS

A TEXT-BOOK OF PATHOLOGY, with an Introductory Section on Post-Mortem Examinations and the Methods of Preserving and Examining Diseased Tissues. By Francis Delafield, M.D., and T. Mitchell Prudden, M.D. Revised with the co-operation of Francis Carter Wood, M.D. Tenth Edition. Completely revised. 8vo., 1144 pages, illustrated by 14 full-page plates in black and colors, and by 694 line and half-tone cuts in black and numerous colors. Wm. Wood & Co., New York. Extra muslin, \$6.00 net; leather, \$7.00 net.

This text-book has been brought up-to-date in all respects, but has not been materially enlarged, obsolete matter having been cut out to make room for additions. The book is so well known and has enjoyed so great and so long a popularity, that much description is not necessary. It compares favorably with previous editions.

The important advances in the knowledge of pathology, which have been made during the past three years, have taken place along many lines. Some of them involve changes in the point of view; a few are actual achievements of research; while some concern new technical procedures.

KIRKES' HANDBOOK OF PHYSIOLOGY. Eighth American Revision. Revised by Dr. Chas. W. Greene. 8vo., 790 pages, illustrated with 2 colored plates and over 500 engravings in black and numerous colors. Wm. Wood & Co., New York. Extra muslin, \$3.00 net.

Dr. Greene has made a thorough revision of this edition, incorporating the advances in Physiology which have been made since 1910.

New material, especially along the lines of internal secretion, has been introduced and other features of the book

have been brought up to date. Many of the discussions and illustrative laboratory experiments have been rewritten, and improvements simplifying the technique have been incorporated. The student in Physiology gains the greatest strength in his laboratory experiments when the tests he executes are chosen from the standpoint of the pedagogical efficiency of the entire work. In this field, under the present day conditions, the determining pedagogical horizon include not only the matter of physiology, but that of the field of clinical medicine and surgery for which physiology furnishes the foundation.

A MANUAL OF PHYSIOLOGY, WITH PRACTICAL EXERCISES. By G. N. Stewart, M.A., D.S.C., M.D., etc. Professor of Experimental Medicine in Western Reserve University, Clinical Physiologist to Lakeside Hospital, Cleveland. Seventh Edition, with colored plate, and 467 other illustrations. 8vo. 1156 pages. Cloth \$4.00 net.

The present edition has been extensively revised. The rapid progress of biochemistry made it necessary to rewrite the chapter on Metabolism. Many changes and additions have also been made in Circulation, Respiration, Digestion, Absorption and Internal Secretion. The blood-gases also receive more consideration than previously, as well as the entire work on the relation of the heat production to the chemical changes in muscle. The nervous system has also been brought up-to-date.

In the modern study of Physiology, with the class divided into sections of

four or less students each, a much more intimate knowledge of the subject may be acquired than under the old regime of instruction of the class as a whole. Stewart's Physiology is so arranged that it may be used either in class or individual study, with or without the performance of the various experiments, which have been quite lucidly described.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES. Embracing the entire range of Scientific and Practical Medicine and Allied Science. By various writers. Third Edition, Completely Revised and Rewritten. Edited by Thomas Lathrop Stedman, A.M., M.D. Complete in eight imperial quarto volumes. Volume IV, 925 double column pages, illustrated by 973 engravings and 5 full-page plates in colors. Wm. Wood & Co., New York. Price: \$7.00 cloth, \$8.00 leather, \$9.00 half morocco.

Of the 444 individual articles contained in Volume IV, especially conspicuous for their excellence are those on: Surgery of the Esophagus; Evolution; Eye (Anatomy, Dioptries, Injuries, Tumors); Eyestrain, Excisions; Fetus (Development and Diseases); Club-foot and other Distortions and Disabilities of the Foot; Fractures; Fungi; Food and Drug Laws; Medical Ethics, and Gunshot Wounds. The short definitions of terms more exhaustively treated in other articles, is a feature of great usefulness.

The Reference Handbook of the Medical Sciences is the most important medical work being issued at the present time in any language, and the present volume is fully up to the average of its predecessors. California is represented in this volume by Dr. Charles Lewis Allen, of Los Angeles, and Leonard W. Ely of San Francisco. A valuable feature in many of the monographs is a brief bibliographical note, giving the essentials, such as would be of value to the practicing physician. Illustration: At the end of the article on Epithelioma, written by Dr. F. C. Wood, we find the following: "The general subject of epithelioma is

treated in Ribbert: *Das Karzinom des Menschen*, 1911. The monograph of Krompecher: *Der Bazalzellenkrebs*, 1903, illustrates many interesting tumors of this type. The classification of the tumors is described in condensed form by Darier: *Précis de dermatologie*, 1909; and the subject of the benign cystic epitheliomata has been reviewed by Frieboes: *Beitrag zur Klinik und Histopathologie der gutartigen Hauteptitheliome*, 1912. For a study of adamantinomatous and related tumors, see Malassez: *Les débris épithéliaux paradentaires*, 1910." Such bibliographies make the Handbook still more valuable as a work of reference.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, *Materia Medica*, and Diagnosis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Hospital; one time Clinical Professor of Diseases of Children in the University of Pennsylvania; Member of the Association of American Physicians. Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia; Ophthalmologist to the Frederick Douglass Memorial Hospital; Instructor in Ophthalmology, Philadelphia Polyclinic Hospital and College for Graduates in Medicine. Volume III, September, 1914. Diseases of the Thorax and Its Viscera, including the Heart, Lungs and Blood Vessels; Dermatology and Syphilis, Obstetrics, Diseases of the Nervous System. Lea & Febiger, Philadelphia and New York, 1914.

The contributors to this volume are Edward P. Davis, M.D., of Philadelphia, William Ewart, M.D., F.R.C.P., of London, William S. Gottheil, M.D., of New York, and William G. Spiller, M.D., of Philadelphia. Special mention is due the introductory article by Ewart, on Diseases of the Thorax and its viscera, including the Heart, Lungs and Blood Vessels, to which nearly one hundred pages are devoted. Tuberculosis is very justly given first place. "Within the scope of this report, the most far-reaching contribution of the last twelve months, next to Alexis Carrel's heart-clamping experiments, to

James B. Murphy's heteroplastic transplantations of neoplasms, and to Abel, Rowntree, and Turner's 'Vividiffusion of the blood,' is the striking revival of the Medicinal treatment of Tuberculosis in the shape of the 'Intensive Iodine Therapy' of L. Boudreau, and of the 'Nascent Iodine Therapy' of David Curle. This cannot fail to tell upon the general therapeutical currents which have prevailed for many years in the management of pulmonary tuberculosis. Yet the final word has not been said for bacillotherapy."

Progressive Medicine is a work needed by every progressive physician.

THE CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume III, Number V. Octavo of 190 pages, 61 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Published Bi-Monthly. Price per year: Paper, \$8.00. Cloth, \$12.00.

In the course of a clinical talk, September 2, 1914, Dr. Murphy stated his belief that the X-Ray is of value in the prevention of recurrence of breast carcinoma. "Its retarding action on the development of a carcinoma is due, we believe, to the fact that it is capable of stimulating cicatriciation or connective tissue formation around the malignant cells to the degree of strangulating them. On these malignant cells which have escaped from the primary focus into the neighboring tissues, we believe that the X-Ray has some effect. We use it on practically all our carcinoma cases after operation, and we use a relatively hard tube in giving the treatments.

"We have not had much experience yet with the Coolidge tube, but every present indication points to the conclusion that Coolidge's invention is one of the greatest recent advantages in X-Ray engineering and is going to be invaluable to us in the treatment of deep-lying and inoperable malignant tumors."

The Clinics are so good that the reviewer is tempted to the use of extensive excerpts.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otolaryngology, Rhinology, Laryngology, Hygiene, and Other Topics of Interest to Students and Practitioners. By Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U. S. A. With the Collaboration of John A. Witherspoon, M.D., Nashville, Tenn.; Sir Wm. Osler, M.D., Oxford; A. McPhedran, M.D., Toronto; Frank Billings, M.D., Chicago; Chas. H. Mayo, M.D., Rochester; Thos. H. Rotch, M.D., Boston; John G. Clark, M.D., Philadelphia; James J. Walsh, M.D., New York; J. W. Ballantyne, M.D., Edinburgh; John Harold, M.D., London; Richard Kretz, M.D., Vienna. With Regular Correspondents in Montreal, London, Paris, Berlin, Vienna, Leipzig, Brussels, and Carlsbad. Volume III. Twenty-fourth Series, 1914. Philadelphia and London. J. B. Lippincott Co.

This issue of the International Clinics contains quite an extensive report of the Surgical Clinic of Dr. John B. Deaver at the German Hospital in Philadelphia, reported by Dr. P. G. Skilern, Jr. The frontispiece shows an obstruction of sixteen inches of ileum by an unchewed and undigested conglomeration of peas and beans with tapeworms (*Tenia saginata*). It was apparently a case of temporary mental aberration. The treatment was surgical, resection of the sixteen inches of obstructed bowel. That is apparently a small matter in the hands of Deaver.

CASE HISTORIES IN OBSTETRICS. By Robert L. DeNormandie, M.D., of the Harvard Medical School, Boston Lying-in Hospital and Boston Dispensary. Octavo 516 pages. Price \$4.00.

This is the fifth volume of the Case History Series and sets forth admirably the Case History and Conference Method upon which those volumes are based and which they have so successfully made known. The distinctive feature of this volume is in the Summaries which follow the groups of case histories. Each summary forms a considerable chapter and is a complete consideration of the subject set forth in the cases quoted. In each, the cases of the group are compared and the les-

sons which the cases present are emphasized. This volume contains practically a post-graduate clinical course in obstetrics, in a form not only instructive but interesting and gives to the practitioner or student who has had the fundamentals of the subject, a complete course, systematically arranged, well considered in every particular and thoroughly indexed for reference.

A MANUAL OF DISEASES OF THE NOSE, THROAT AND EAR. By E. B. Gleason, M.D., Professor of Otology in the Medico-Chirurgical College, Philadelphia. Third edition, thoroughly revised. 12mo of 590 pages, 223 illustrations. Philadelphia and London: W. B. Saunders Co., 1914. Cloth, \$2.50 net.

More space has been given to diagnosis and treatment than to rare and difficult operations that the beginner should not do. However these operations are described with sufficient minuteness for the student to practice them upon the cadaver. This method of study cannot be too highly endorsed because it produces a practical knowledge of the anatomy and topography, for instance of the respiratory tract and ear, and skill in the handling of instruments that cannot otherwise be readily obtained. The trend of opinion has lately been toward conservative intranasal operations on the accessory sinuses rather than radical external operations such as that of Killian.

LOCAL AND REGIONAL ANESTHESIA, including Analgesia. By Carroll W. Allen, M.D., of Tulane University, New Orleans, with an introduction by Rudolph Matas, M.D., of Tulane University, New Orleans. Octavo of 625 pages with 255 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

This monograph represents the teachings of Matas in the Tulane University and his work in the Charity Hospital, New Orleans, supplemented by the research and clinical observation of his pupil and co-worker, Dr. Allen. It is quite complete, containing chapters also on spinal, epidural, paravertebral,

and parasacral analgesia, and on other applications of local and regional anesthesia to the surgery of the eye, ear, nose and throat, and to dental practice. Special attention is paid novocain and suprarenin. The wide range of the work is indicated by the following: "A new narcotic, pantopon, introduced by Sahli, of Berne, in 1909, is now occupying much attention owing to the therapeutic advantages claimed for it. It consists essentially of a mixture of the combined alkaloids of crude opium, said to exist in a definite stable solution in the form of chlorids in a fairly constant proportion—viz., morphin, narcotin, codein, papaverin, narcein, thebein, hydrocotarnin, codamin, laudanin, laudanidin, laudanocin, miconidin, papaveramin, protopin, lanthopin, cryptopin, gascopin, oxynarcodin, xanthalin, and tritopin. It is obtained as a yellowish-brown amorphous powder resembling powdered opium, easily soluble in water, less so in alcohol. Pantopon is particularly recommended for administration before general anesthetics, but it may be, if it fulfill the claims made for it, that it may largely supersede morphin in a more general use." Space forbids further quotation. The work is well worthy a place on the shelves of all practitioners interested in the use of anesthetics.

THE FUGITIVE PHYSICIAN, OR THE ADVENTURES OF A TEXAS DOCTOR. "Dr. Hyoscymus Flyer." N. B. Knight & Co., Real Estate Dealers, Houston, Texas, state agents. Price 25 cents.

This is an account of some of the experiences of a "body snatcher," who was indicted by the grand jury in Texas, had to leave his home and after rambling a few years in Mexico, returned, was arrested, tried and convicted. The description of a bull fight is one of its best features. It is a rather striking piece of real estate literature.

MOTHERHOOD. By E. S. Harris, M.D.,
Bridges Building, Independence, Mo.
Price 10 cents.

This is a short, cheap brochure, sold to physicians only, in lots of 25 or more, with the purchaser's name and address on the front page. It contains a lot of wholesome advice.

TROPICAL DISEASES. A Manual of the Diseases of Warm Climates. By Sir Patrick Manson, G.C.M.G., M.D., LL.D. (Aberd.), Fellow of the Royal College of Physicians, London; Fellow of the Royal Society; Hon. D. Sc. Oxon.; Foreign Associate of the Académie de Médecine, France; Honorary Member of the Société de Médecine de Gand; Hon. Associate of the Royal Academy of Medicine, Turin; Consulting Physician to the Seamen's Hospital Society; Lecturer in the London School of Tropical Medicine; Late Medical Adviser to the Colonial Office and to the Crown Agents for the Colonies, etc., etc. With 12 color and 4 black-and-white plates and 239 figures in the text. Fifth edition, revised throughout and enlarged. William Wook & Co., 51 Fifth Avenue, New York. Price, \$5.00 net.

The name of Manson is so intimately connected with our modern knowledge of the tropical diseases, that we are glad to welcome anything from this pen on the subject, and especially a new revised edition of his Manual. Considerable advance in the knowledge and management of tropical diseases have occurred since the publication of the previous edition in 1907. It may not be amiss to mention some of the more recent advances in tropical pathology. For example, the discovery that kala-azar, especially the infantile form, is not an infrequent disease in the countries surrounding the Mediterranean Sea, and also elsewhere in tropical and sub-tropical countries, that it is intimately associated in many of these countries with the dog, and that peculiar forms of dermal leishmaniasis are to be found in South America; that the transmission of *Trypanosoma gambiense* by *Glossina palpalis* is not, as was supposed, a simple mechanical process, but, as Kleine has shown, involves a necessary biological evolution of the insect; that a

peculiarly virulent form of the trypanosome occurs in Rhodesia, which is transmitted by *Glossina morsitans*; that there exists in South America a form of trypanosomiasis which is transmitted by *Lamproliptus megistus*; that a specific form of three-days' fever is caused by an unknown germ introduced into the human subject by the bite of a phlebotomus; that, as has been pointed out by Castellani, yaws is produced by a spirochaete closely resembling that of syphilis; that beriberi, at all events in the Malay states, is a result of a diet of over-milled rice, as indicated by Braddon and proved by Fraser and Stanton; that there is a non-periodic variety of *Filaria bancrofti* specially common in the Pacific Islands; that *Schistosomum japonicum* is by no means an uncommon parasite in large districts of China and Japan; that it gives rise to a deadly disease, and that it is acquired by contact with the water of certain districts. These and many minor discoveries which might be mentioned, all made within the last few years, testify to the activity in pathological research into tropical diseases.

ROSE AND CARLESS' MANUAL OF SURGERY. For Students and Practitioners. Ninth Edition, Revised by Albert Carless, M.S., F.R.C.S. 8vo., 1420 pages, with 609 cuts of the text, and 16 full-page colored plates. Muslin, \$6.00 net. Half morocco, \$7.00 net. Wm. Wood & Co., Publishers, New York.

This book has been thoroughly revised, but not greatly enlarged. A number of new illustrations have been added. Medical graduates of the past ten years will require no introduction to "Rose and Carless," since it has become one of the most widely used textbooks on surgery in our medical schools.

The triennium which has elapsed since the issue of the eighth edition of this Manual has been characterized by the steady elaboration of ideas and methods which had already been introduced, and required time for their in-

vestigation. Thus, a vast amount of work has been devoted to the consideration of salvarsan and radium. Salvarsan stands as the conqueror of the worst ill effects of syphilis, if only it be employed in time; radium has proved itself a potent agent for good in many cases, but the magniloquent prophets who hailed it as the victor of cancer have not yet proved their claims. Steady progress is being made in all the varied realms of research touched on in this work.

PHYSICIANS' VISITING LIST.

Blakiston's well-known pocket piece is so well known, in its varied forms, that any minute description would be superfluous. This year they enclose a slip, stating that as soon as the Ninth Edition of the U. S. Pharmacopoeia becomes official, they will send a new Dose List containing the changes and additions, to all purchasers of the Physicians' Visiting List who make application for it.

STEDMAN'S MEDICAL DICTIONARY.

By Thomas L. Stedman, A.M., M.D., Editor of the Medical Record, etc. Third Edition, Revised, and Enlarged. Royal 8vo., 1079 pages, illustrated. Flexible red morocco. Indexed \$5.00 net. Plain \$4.50 net. Wm. Wood & Co., Publishers, New York.

Stedman's Dictionary has only been on the market for three years, and the appearance of the Third Edition already speaks louder than words for its success. It is by long odds the most scholarly of Medical Dictionaries, and is also the most complete. This new edition has been brought up-to-date by the addition of new terms in medicine and the allied sciences. A considerable additional number of pronunciations has been incorporated. The work has been practically reset, and is printed from new plates throughout.

No physician should permit his library to be without a standard up-to-date medical dictionary. And he should use it freely. The very practical char-

acter of this work is indicated by the following Stethoscopic Abbreviations, suggested by Professor Langmann of the Veilefjord Sanatorium and adopted by the International Tuberculosis Association at its meeting in Berlin in October, 1913, for use in the stethoscopic findings in the preparation of case reports:

Abbr.	Latin	English
a.	anterior	anterior
amph.	amphoricus	amphoric
Ang.	angulus scapulae	angle of the scapula
applan.	applanatus	flattened
broneh.	bronchialis	bronchial
Brph.	bronchophonia	broncophony
C.	costa	rib
C ₂ , C ₃ , etc.	costa II, costa III, etc.	2nd rib, 3d rib, etc.
Cl.	clavicula	clavicle
cons.	consonans	tinkling
Craq.	crepitus	crepitation
crep.	crepitans	crepitant
d.	dexter	right
dilat.	dilatatus	dilated
dim.	diminutus	diminished
Exp.	expiratio	expiration
fort.	fortis	strong
Frem.	fremitus vocalis	vocal fremitus
Frict.	frictio	friction
inmobil.	immobilis	immovable
inf.	inferior	inferior
Insp.	inspiratio	inspiration
Interc.	spatium intercostale	intercostal space
M.	mutitas	dulness
M ₁	mutitas levis	slight dulness
M ₂	mutitas gravis	marked dulness
M ₃	mutitas absoluta	absolute dulness
Margo	margo pulmonis	border of the lung
Met.	metallia	metallic sound
mobil.	mobilis	movable
p.	posterior	posterior
Pap.	papilla mammae	nipple
prolong.	prolongatus	prolonged
Resp.	respiratio	respiration
retard.	retardatus	delayed
rh.	rhonchi	rales
rl.		fine rales
RL.		medium rales
rl ₁		coarse rales
rl ₂		few fine rales
RL ₃		moderate number of medium rales
s.	sinister	left
sacc.	saccatus?	cogwheel
1-2 Sc.	medio regionis infrascapulae	middle of the infrascapular region of the scapula
sicc.	siccus	dry
Sp.	spina scapulae	spine of the scapula
suberep.	suberepitans	subcrepitant
sup.	superior	superior
Th.	thorax	chest
Tymp.	tympanismus	tympanicity
u.a.	usque ad	up to, as far as
ves.	vesicularis	vesicular
		only after coughing

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SOCIETY REPORTS

LOS ANGELES OBSTETRICAL SOCIETY.

Dr. Titian Coffey, President.

Dr. Geo. E. Malsbary, Secretary.

November 10, 1914.

DISCUSSION OF DR. BRANDEL'S PAPER.*

Dr. Frank C. Ainley: The great majority of normal women, if we call the average the normal, can nurse their babies for a reasonable number of months if they will. But a woman may not be able to nurse her baby and devote an equal amount of energy to other occupations. I would like to ask Dr. Brandel his idea as to the proper time for stopping night nursings, which feedings should be cut out first and when they should be cut out. I would also like to know his recommendation concerning the so-called matinee bottle, and also his opinion as to the result and the period at which one gets that result after giving the matinee bottle.

Dr. H. M. Rooney: Dr. Brandel's paper is very comprehensive, but I don't believe he mentioned supplementary feeding. A great many women cannot adequately nurse their children, no matter what time they devote to that exclusive of other occupations, and in such cases we must try other means to keep up the nutrition of the child. The two feedings seem to mix thoroughly in the cases in which I have tried them.

Dr. Olga McNeile: The paper is interesting to me chiefly because of our interest in prophylactic measures of all kinds. Too many women are turned loose after leaving the hospital without any instructions being given, by

the physician. It seems to me that we should instruct the mother regarding the nursing and care of the child, and give the reasons for nursing the child as we tell her, and also the reasons for the care of the bottle and the use of the breast binders, etc. Probably the mothers of the future will be better instructed, for we are already having school instruction of children in the care of babies.

Dr. E. M. Lazard: The Doctor spoke of eclampsia as contraindicating breast feeding. I have had one experience with eclampsia, the attack coming on about eight hours after delivery. The baby had been to the breast already and had gotten a little of the colostrum. The baby was not nursed after the mother had the convulsion. On the third day afterward the baby developed eclamptic convulsions, and it was some two or three days before we could eliminate the eclamptic toxins from the baby. So that I feel that in eclampsia we should not put the baby to the breast until we are satisfied that all the toxins have been eliminated from the maternal organism. The question of supplementary feeding is worthy of more extended discussion. With the aid of supplementary feeding, many mothers are able to continue breast feeding for the full nine months who otherwise would not be able to do so. The supplementary feedings can be given so that the mother may get away from the home and household duties, and she will then be in a much better frame of mind and better able to nurse the baby. I have under observation at the present time a case that by antithesis possibly demonstrates the value of the proper sort of instruction. I was called in some weeks after the birth of the baby and found that the physician had emphasized the dangers of mastitis and the dangers

*Dr. Brandel's paper, "Breast Feeding, Indications and Contraindications," appears in this issue of the Southern California Practitioner.

that might come with the flow of milk and had scared the young mother very effectually. I don't know how long they continued the breast feeding, but they told me that after ineffectually trying for several days they had resorted to bottle feeding. That is one kind of instruction we don't want to give the mothers.

Dr. P. V. K. Johnson: The breast food is the best food for the child. Ninety per cent of the illness of the baby is due to bottle feeding. It is every doctor's duty to see the prospective mother before delivery and take care of the nipples and see that the best care is taken of the breasts and that the bowels are properly regulated. Under proper care most mothers can nurse their babies for several months, and the normal mother should be able to do so. Many cases are forced to bottle feeding through improper instruction of the mother. As to eclampsia, I saw the case Dr. Lazard referred to, in which the child became eclamptic and did not do well and had to be taken away from the breast. In regard to other diseases, in tuberculosis, syphilis and diphtheria, the child should be taken off the breast; and in acute tonsilitis and digestive attacks, it is better to take the child away from the breast temporarily, in the meantime resorting to the use of the breast pump. As to supplementary feeding, I am in favor of substituting the bottle for the breast as soon as practicable, especially the night bottle, so the mother can get undisturbed rest.

Dr. Lulu Peters: I would like to enquire as to the use of the four-hour feeding. I tried it in one case but apparently without success.

Dr. E. M. Lazard: The so-called Murphy breast binder tends to crush the breasts against the sternum and evert the nipple. The breast binder should be applied with pressure around the periphery, leaving the nipple free. The Doctor spoke rather disparagingly

of the use of alcohol and astringents on the nipple. I believe, as the Doctor said, they tend to produce fissures rather than to prevent them. The bismuth and castor oil mixture is better.

Dr. P. O. Sundin: As to alcohol, I have found massaging the nipple with a saturated solution of boracic acid in alcohol is very satisfactory if used for a month before labor.

Dr. S. Y. Van Meter: There is one contraindication to nursing I have encountered that was not mentioned and that is an imperfect development of the mammary gland. I had a case not long ago in which the mother had no mammary gland. She was a strong, apparently healthy woman, and weighed about 165 pounds. The milk did not appear and after ten days the baby had decreased in weight. The baby was put on artificial food and gained in weight.

Dr. W. V. C. Francis: The indications for breast feeding are pretty generally accepted by obstetricians and pediatrics. The indications for the withdrawal of the breast feeding are not so clear. Often the baby is placed on artificial food because it cries and apparently is not satisfied. We should teach the people that breast feeding is the natural method of feeding, and we should not too quickly advise bottle feeding. My three children have all been breast fed. In Europe two of them were nursed nine months. In this country, where my wife had to occupy her mind with other occupations, not altogether congenial but necessary here, she was only able to nurse the child four months, when we had to begin adding the use of artificial foods. We used Mellin's Food, which is an excellent food when properly modified. After six or seven months the child was able to take straight milk. Emphasis is often laid on the convenience of artificial feeding. It has always seemed to me that it is a good

deal more trouble to get out of bed and prepare the bottle than to nurse the child at the breast.

Dr. Ruth Purcell: About a year ago there was an article published about giving the mother a little boiled corn meal with water. This I have tried with excellent results. It seems to work better than giving extra milk.

Dr. A. J. Scott, Jr.: In maternity cases the mothers are so often troubled with constipation. Dr. Brandel states that the best laxative in these cases is castor oil. In my experience, every time the mother takes castor oil the child is affected by it; and I have not found it a very good laxative for prolonged use. Petroleum emulsion works well in some cases and in some it does not. I would like to know of a really good laxative for habitual constipation in maternity cases. I do not use the alcoholic preparations on the breast. I usually advise the mothers, as they wish to retain the fair form of the abdomen and breast afterward, to use olive oil both on the abdomen and on the breasts. I have found when they use it they do not have cracked nipples. I have tried the four hour feeding on three cases and on every one it failed.

Dr. Harry M. Brandel, in closing: In supplemental feeding, if the baby is to have one such meal, it ought to be given in the afternoon so that the mother may go out. If the mother is willing to nurse the child nine months, it would seem that she is entitled to some recreation. It is better to give the supplemental feeding in the afternoon than at night. Nursing at night stimulates the breast so there is more milk in the morning. If the bottle is used at night the breasts are more likely to be flabby in the morning. The great trouble in starting supplemental feeding is that if the baby does well, they will give additional supplemental feedings. Thus it may lead to harm.

Authorities in England and Germany strongly favor the four hour interval. In this country the shorter period is more in vogue. Personally, I think the three hour interval is better. When a longer interval is necessary, artificial feeding is often resorted to. An interesting case occurred in England in which the mother was operated upon and at the end of three months the baby was put back on the breast. The milk began to come in the left breast and later the flow was re-established in the right breast also, which had previously been injured.

Dr. William V. C. Francis read a paper on "Three Years' Work in the Children's Hospital,"* which was discussed by Doctors Coffey, P. V. K. Johnson, Hawkins-Ambler, and by the essayist in closing. The discussion showed the general good will of the members of the Society toward the Children's Hospital and its work, but was not of a scientific character.

*Published in this issue of the Southern California Practitioner.

TREATMENT OF SORE FEET.

The British Red Cross Association has issued a leaflet giving directions for the prevention and treatment of sore feet in troops:

1. Feet should be washed with soap and water, and very gently dried—not rubbed.
2. Dab with methylated spirit on cotton wool, except where the skin is broken.
3. When dry, dust with powder com-

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posed of equal parts of starch and boracic powder or fuller's earth.

4. Bandage with clean bandage, preferably of domette, not too light—or else put on clean socks. All dirty socks should be washed and dried before use.

5. Reddened skin or recent blisters should be protected by strips of strapping.

6. All corns should be protected by strapping. Open sores require surgical advice, and this should be sought whenever possible, especially if the surrounding redness of the foot is extending.

7. Toenails should be cut short.

8. Hard boots should be well greased—mutton fat is the best. They should be well dusted inside with starch and boracic powder.

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THE COST OF PASTEURIZING MILK.

WASHINGTON, D. C., May 6, 1914.

—With a properly designed and properly operated plant, the average cost of pasteurizing milk is \$0.00313 a gallon, and of cream \$0.00634 a gallon, according to tests recently conducted by the U. S. Department of Agriculture. These tests also show that the "flash" process, by which milk is raised to a temperature of 165°F. and kept there for a moment only, is more expensive than the "holder" process, in which milk is maintained for 30 minutes at a temperature of 135° to 145°. The "holder" process requires 17 per cent less heat than the other, and in addition, there is a saving on the expense of cooling. For hygienic reasons, also, the Department recommends the "holder" process.

Many milk plants and creameries, it was found, do not attempt to make any

use of the latent heat in the exhaust steam from their engines and steam driven auxiliaries. This heat would be sufficient, in many cases, for all the pasteurizing done in the plants, if it were properly utilized instead of being permitted to go to waste. When exhaust steam is used, it is calculated that for every 400 pounds of milk pasteurized per hour with it, one horsepower is taken from the boiler load, with a consequent saving in fuel cost.

Another common source of waste was found to be the faulty arrangement of apparatus and leaky piping. The loss from these causes may run as high as 30 per cent of all the heat required, a loss that can be reduced to negligible proportions by proper arrangement. The use of the regenerator, in particular, by which a large portion of the heat in the pasteurized milk is transferred to the raw product, is also an important factor in securing maximum economy.

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Official Organ of The Southern California Medical Society

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DR. GEO. E. MALSARY, Editor.....500 Auditorium Building, Los Angeles, Cal.



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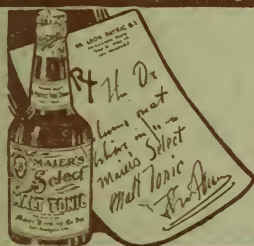
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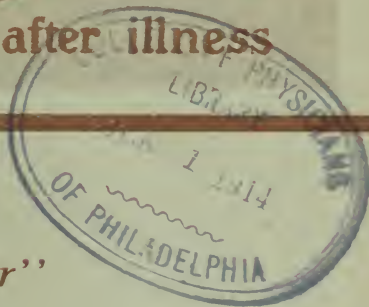
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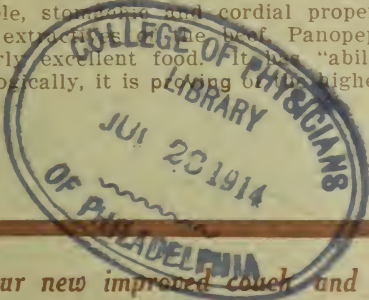
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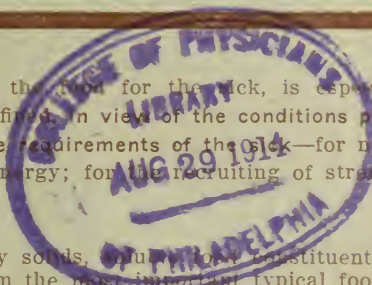
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